

# General Catalog

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National University

## 2008 National University General Catalog

Volume 71

September 2007

National University Academic Headquarters 11255 North Torrey Pines Road La Jolla, CA 92037-1011 (858) 642-8800

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1 (800) NAT-UNIV (628-8648)

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## A Message from President Gibson

Dear Student,

On behalf of the Board of Trustees, staff, faculty, alumni and your fellow students, I am pleased to welcome you to National University.

Founded in 1971, National University was among the first institutions in the United States to recognize and focus on the unique educational needs of non-traditional learners. That commitment to our students has made National University the second-largest, private, nonprofit institution of higher learning in California.

National University is unique because of its intensive onecourse-per-month format, regional campuses and flexible online degree programs which enable students to complete graduate and undergraduate programs in an accelerated time frame while maintaining family and work responsibilities.

Throughout this catalog, and in every class offered at National University, you will observe a consistent focus on quality and an ongoing commitment to incorporating current subject matter into our curricula. Our goal is to ensure that the education you receive at National University is among the most rigorous, relevant, and rewarding in higher learning.

National University remains focused on providing students with state-of-the-art technologies, including high-tech classrooms and a library with one of the largest collections of eBooks in the United States. National University offers more than 60 programs that are available either completely or partially online, allowing students locally, nationally, and globally to pursue a broad range of degrees and credentials.

Our commitment to serving the students of National University led to the creation of the ground-breaking Student Concierge Service, which became fully functional earlier this year with the stated goal of providing students with a one-stop service center that is available seven days a week, 365 days a year. The Student Concierge Service can serve you in many ways, including as a liaison for interfacing with any aspect of the University; an advocate for you as you navigate National's processes and programs; and as a central source of quality assurance.

National University is proud of what it has accomplished in the past 36 years, and we look forward to sharing an even more distinguished future with you as we continue to seek new and better ways to address your needs as a student.

Sincerely, Dana L Gibsor



Dana L. Gibson President National University

Note: the University reserves the right to change or modify policies, regulations, curricula, courses, tuition and fees, or any other aspect of its programs described in this catalog at any time.

Not all courses or programs listed in this catalog will be available at every campus or online.

Not all facilities, equipment and other resources will be available at every campus.

Catalog Effective Date: September 3, 2007

For more information, call

1 (800) NAT-UNIV (628-8648)

Current students call 1 (866) NU-ACCESS (682-2237)

Visit us on the web

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## Administration

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Mark Redfern, M.B.A. Associate Regional Dean, Camarillo

David Waller, M.A. Associate Regional Dean, Costa Mesa and City of Orange

James Wilson, B.A. Associate Regional Dean, Online

## Calendar and Class Schedules

#### Summer 2007

Summer Quarter Begins: Monday, July 9 Labor Day: Monday, September 3 Summer Quarter Ends: Saturday, September 29

Fall 2007 Fall Quarter Begins: Monday, October 1 Thanksgiving: Thursday, November 22 and Friday, November 23

Fall Quarter Ends: Saturday, December 22

Winter 2008

Winter Quarter Begins: Monday, January 7 Martin Luther King's Birthday - Monday, January 21 President's Day - Monday, February 18 Winter Quarter Ends: Saturday, March 29

Spring 2008

Spring Quarter Begins: Monday, April 7 Memorial Day - Monday, May 26 Spring Quarter Ends: Saturday, June 28

Summer 2008 Summer Quarter Begins: Monday, July 7 Labor Day - Monday, September 1 Summer Quarter Ends: Saturday, September 27

Fall 2008

Fall Quarter Begins: Monday, September 29 Thanksgiving - Thursday, November 27 & Friday, November 28 Fall Quarter Ends: Saturday, December 20

Winter 2009 Winter Quarter Begins: Monday, January 5 Martin Luther King's Birthday - Monday, January 19 President's Day - Monday, February 16 Winter Quarter Ends: Saturday, March 28

Spring 2009 Spring Quarter Begins: Monday, April 6 Memorial Day - Monday, May 25 Spring Quarter Ends: Saturday, June 27

Summer 2009 Summer Quarter Begins: Monday, July 6 Labor Day - Monday, September 7 Summer Quarter Ends: Saturday, September 26

Fall 2009

Fall Quarter Begins: Monday, September 28 Thanksgiving - Thursday, November 26 and Friday, November 27 Fall Quarter Ends: Saturday, December 19

Current students call 1 (866) NU-ACCESS (682-2237)

denotes starting dates of classes.

denotes national holiday. The University will be closed on this day.

| SEPT | EMBE | R 2007 | 7   |    |    |    |
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Calendar, Schedules

## Undergraduate Class Schedule

Undergraduate Classes (4.5 quarter units, 45 contact hours)

All Online classes begin on Mondays, with the exception of those terms when Monday is a holiday.

In these cases, online courses begin on Tuesday. Ending dates vary by program.

National University's academic year is divided into four twelve week quarters, each composed of three one-month classes. Classes are held two evenings each week from 5:30 to 10:00 p.m.

Undergraduate students generally attend two Saturday sessions from 8:00 a.m. to 12:30 p.m. or 1:00 p.m. to 5:30 p.m. Undergraduate day classes are held either Monday and Wednesday or Tuesday and Thursday from 9:00 a.m. to 2:30 p.m. Eight-week class schedules are listed in SOAR.

| Weekday                       | Time               | Saturday Schedule   |
|-------------------------------|--------------------|---|
| Monday/Wednesday (8 sessions) | 5:30 p.m10:00 p.m. | 8:00 a.m12:30 p.m. or 1:00 p.m5:30 p.m.; Normally two Saturdays,  |
|                               |                    | three Saturdays if weekday holiday makes it necessary.  |
| Tuesday/Thursday (8 sessions) | 5:30 p.m10:00 p.m. | 8:00 a.m12:30 p.m. or 1:00 p.m5:30 p.m.; Normally two Saturdays, three Saturdays if weekday holiday makes it necessary. |

24 month calendar follows:

#### Undergraduate Class Schedule Monday/Wednesday

#### Summer 2007

July 9, 11, 16, 18, 23, 25, 28(8-12:30), 30, August 1, 4(8-12:30) August 6, 8, 13, 15, 18(8-12:30), 20, 22, 27, 29, September 1(1-5:30) September 5, 8(8-12:30), 10, 12, 17, 19, 22(8-12:30), 24, 26, 29(8-12:30)

#### Fall 2007

October 1, 3, 8, 10, 13(8-12:30), 15, 17, 22, 24, 27(1-5:30) October 29, 31, November 5, 7, 12, 14, 17(8-12:30), 19, 21, 24(8-12:30) November 26, 28, December 3, 5, 8(8-12:30), 10, 12, 17, 19

November 26, 28, December 3, 5, 8(8-12:30), 10, 12, 17, 19, 22(1-5:30)

#### Winter 2008

January 7, 9, 12(8-12:30), 14, 16, 23, 26(8 - 12:30), 28, 30, February 2(8-12:30) February 4, 6, 9(8-12:30), 11, 13, 20, 23(1-5:30), 25, 27, March 1(1-5:30) March 3, 5, 10, 12, 17, 19, 22(8-12:30), 24, 26, 29(8-12:30)

#### Spring 2008

April 7, 9, 14, 16, 19(8-12:30), 21, 23, 28, 30, May 3(1-5:30) May 5, 7, 10(8-12:30), 12, 14, 17(1-5:30), 19, 21, 28, 31(8-12:30) June 2, 4, 9, 11, 14(8-12:30), 16, 18, 23, 25, 28(1-5:30)

#### Summer 2008

July 7, 9, 14, 16, 21, 23, 26(8-12:30), 28, 30, August 2(8-12:30) August 4, 6, 11, 13, 16(8-12:30), 18, 20, 25, 27, 30(1-5:30) September 3, 6(8-12:30), 8, 10, 15, 17, 20(8-12:30), 22, 24, 27(8-12:30)

#### Fall 2008

September 29, October 1, 6, 8, 11(8-12:30), 13, 15, 20, 22, 25(1-5:30) October 27, 29, November 3, 5, 10, 12, 15(8-12:30), 17, 19, 22(8-12:30) November 24, 26, December 1, 3, 6(8-12:30), 8, 10, 15, 17, 20(1-5:30)

#### Winter 2009

January 5, 7, 10(8-12:30), 12, 14, 21, 24(8-12:30), 26, 28, 31(8-12:30) February 2, 4, 7(8-12:30), 9, 11, 18, 21(1-5:30), 23, 25, 28(1-5:30) March 2, 4, 9, 11, 16, 18, 21(8-12:30), 23, 25, 28(8-12:30)

#### Spring 2009

April 6, 8, 13, 15, 18(8-12:30), 20, 22, 27, 29, May 2(1-5:30) May 4, 6, 9(8-12:30), 11, 13, 16(1-5:30), 18, 20, 27, 30(8-12:30) June 1, 3, 8, 10, 13(8-12:30), 15, 17, 22, 24, 27(1-5:30)

#### Undergraduate Class Schedule Tuesday/Thursday

#### Summer 2007

July 10, 12, 17, 19, 21(8-12:30), 24, 26, 31, August 2, 4(1-5:30) August 7, 9, 14, 16, 21, 23, 25(8-12:30), 28, 30, September 1(8-12:30) September 4, 6, 11, 13, 15(8-12:30), 18, 20, 25, 27, 29(1-5:30)

#### Fall 2007

October 2, 4, 9, 11, 16, 18, 20(8-12:30), 23, 25, 27(8-12:30) October 30, November 1, 3(8-12:30), 6, 8, 10(8-12:30), 13, 15, 20, 24(1-5:30) November 27, 29, December 4, 6, 11, 13, 15(8-12:30), 18, 20, 22(8-12:30)

#### Winter 2008

January 8, 10, 15, 17, 22, 24, 26(1-5:30), 29, 31, February 2(1-5:30) February 5, 7, 12, 14, 19, 21, 23(8-12:30), 26, 28, March 1(8-12:30) March 4, 6, 11, 13, 15(8-12:30), 18, 20, 25, 27, 29(1-5:30)

#### Spring 2008

April 8, 10, 15, 17, 22, 24, 26(8-12:30), 29, May 1, 3(8-12:30) May 6, 8, 13, 15, 17(8-12:30), 20, 22, 27, 29, 31(1-5:30) June 3, 5, 10, 12, 17, 19, 21(8-12:30), 24, 26, 28(8-12:30)

#### Summer 2008

July 8, 10, 15, 17, 19(8-12:30), 22, 24, 29, 31, August 2(1-5:30) August 5, 7, 12, 14, 19, 21, 23(8-12:30), 26, 28, 30(8-12:30) September 2, 4, 9, 11, 13(8-12:30), 16, 18, 23, 25, 27(1-5:30)

#### Fall 2008

September 30, October 2, 7, 9, 14, 16, 18(8-12:30), 21, 23, 25(8-12:30) October 28, 30, November 4, 6, 8(8-12:30), 11, 13, 18, 20, 22(1-5:30) November 25, December 2, 4, 6(1-5:30), 9, 11, 13(8-12:30), 16, 18, 20(8-12:30)

#### Winter 2009

January 6, 8, 10(1-5:30), 13, 15, 20, 22, 27, 29, 31(1-5:30) February 3, 5, 10, 12, 17, 19, 21(8-12:30), 24, 26, 28(8-12:30) March 3, 5, 10, 12, 14(8-12:30), 17, 19, 24, 26, 28(1-5:30)

#### Spring 2009

April 7, 9, 14, 16, 21, 23, 25(8-12:30), 28, 30, May 2(8-12:30) May 5, 7, 12, 14, 16(8-12:30), 19, 21, 26, 28, 30(1-5:30) June 2, 4, 9, 11, 16, 18, 20(8-12:30), 23, 25, 27(8-12:30)

## Graduate Class Schedule

Graduate Classes (4.5 quarter units, 40 contact hours)

All Online classes begin on Mondays, with the exception of those terms when Monday is a holiday.

In these cases, online courses begin on Tuesday. Ending dates vary by program.

National University's academic year is divided into four twelve week quarters, each composed of three one-month classes. Classes are held two evenings each week from 5:30 to 10:00 p.m.

Graduate students meet for a final session on the last Saturday of the 4-week term, either from 8:30 a.m. to 12:30 p.m. or 1:00 p.m. to 5:00 p.m. Eight-week class schedules are listed in SOAR.

| Weekday                       | Time               | Saturday Schedule   |
|-------------------------------|--------------------|---|
| Monday/Wednesday (8 sessions) | 5:30 p.m10:00 p.m. | 8:30 a.m12:30 p.m. or 1:00 p.m5:00 p.m.; Normally one Saturday, |
|                               |                    | two Saturdays if weekday holiday makes it necessary.            |
| Tuesday/Thursday (8 sessions) | 5:30 p.m10:00 p.m. | 8:30 a.m12:30 p.m. or 1:00 p.m5:00 p.m.; Normally one Saturday, |
|                               |                    | two Saturdays if weekday holiday makes it necessary.            |

#### 24 month calendar follows:

#### Graduate Class Schedule Monday/Wednesday

#### Summer 2007

July 9, 11, 16, 18, 23, 25, 30, August 1, 4(8:30-12:30) August 6, 8, 13, 15, 20, 22, 27, 29, September 1(1-5:00) September 5, 8(8-12:30), 10, 12, 17, 19, 24, 26, 29(8:30-12:30)

#### Fall 2007

October 1, 3, 8, 10, 15, 17, 22, 24, 27(1-5:00) October 29, 31, November 5, 7, 12, 14, 19, 21, 24(8:30-12:30) November 26, 28, December 3, 5, 10, 12, 17, 19, 22(1-5:00)

#### Winter 2008

January 7, 9, 12(8-12:30), 14, 16, 23, 28, 30, February 2(8-12:30) February 4, 6, 9(8-12:30), 11, 13, 20, 25, 27, March 1(1-5:30) March 3, 5, 10, 12, 17, 19, 24, 26, 29(8-12:30)

#### Spring 2008

April 7, 9, 14, 16, 21, 23, 28, 30, May 3(1-5:30) May 5, 7, 10(8-12:30), 12, 14, 19, 21, 28, 31(8-12:30) June 2, 4, 9, 11, 16, 18, 23, 25, 28(1-5:30)

#### Summer 2008

July 7, 9, 14, 16, 21, 23, 28, 30, August 2(8-12:30) August 4, 6, 11, 13, 18, 20, 25, 27, 30(1-5:30) September 3, 6(8-12:30), 8, 10, 15, 17, 22, 24, 27(8-12:30)

#### Fall 2008

September 29, October 1, 6, 8, 13, 15, 20, 22, 25(1-5:30) October 27, 29, November 3, 5, 10, 12, 17, 19, 22(8-12:30) November 24, 26, December 1, 3, 8, 10, 15, 17, 20(1-5:30) 22(1-5:00)

#### Winter 2009

January 5, 7, 12, 14, 21, 24(8-12:30), 26, 28, 31(8:30-12:30) February 2, 4, 7(8-12:30), 9, 11, 18, 23, 25, 28(1-5:00) March 2, 4, 9, 11, 16, 18, 23, 25, 28(8:30-12:30)

#### Spring 2009

April 6, 8, 13, 15, 20, 22, 27, 29, May 2(1-5:00) May 4, 6, 9(8-12:30), 11, 13, 18, 20, 27, 30(8:30-12:30) June 1, 3, 8, 10, 15, 17, 22, 24, 27(1-5:00)

#### Graduate Class Schedule Tuesday/Thursday

#### Summer 2007

July 10, 12, 17, 19, 24, 26, 31, August 2, 4(1-5:00) August 7, 9, 14, 16, 21, 23, 28, 30, September 1(8:30-12:30) September 4, 6, 11, 13, 18, 20, 25, 27, 29(1-5:00)

#### Fall 2007

October 2, 4, 9, 11, 16, 18, 23, 25, 27(8:30-12:30) October 30, November 1, 6, 8, 10(8-12:30), 13, 15, 20, 24(1-5:00) November 27, 29, December 4, 6, 11, 13, 18, 20, 22(8:30-12:30)

#### Winter 2008

January 8, 10, 15, 17, 22, 24, 29, 31, February 2(1-5:30) February 5, 7, 12, 14, 19, 21, 26, 28, March 1(8-12:30) March 4, 6, 11, 13, 18, 20, 25, 27, 29(1-5:30)

#### Spring 2008

April 8, 10, 15, 17, 22, 24, 29, May 1, 3(8-12:30) May 6, 8, 13, 15, 20, 22, 27, 29, 31(1-5:30) June 3, 5, 10, 12, 17, 19, 24, 26, 28(8-12:30)

#### Summer 2008

July 8, 10, 15, 17, 22, 24, 29, 31, August 2(1-5:30) August 5, 7, 12, 14, 19, 21, 26, 28, 30(8-12:30) September 2, 4, 9, 11, 16, 18, 23, 25, 27(1-5:30)

#### Fall 2008

September 30, October 2, 7, 9, 14, 16, 21, 23, 25(8-12:30) October 28, 30, November 4, 6, 11, 13, 18, 20, 22(1-5:30) November 25, December 2, 4, 9, 11, 13(8-12:30), 16, 18, 20(8-12:30)

#### Winter 2009

January 6, 8, 13, 15, 20, 22, 27, 29, 31(1-5:00) February 3, 5, 10, 12, 17, 19, 24, 26, 28(8:30-12:30) March 3, 5, 10, 12, 17, 19, 24, 26, 28(1-5:00)

#### Spring 2009

April 7, 9, 14, 16, 21, 23, 28, 30, May 2(8:30-12:30) May 5, 7, 12, 14, 19, 21, 26, 28, 30(1-5:00) June 2, 4, 9, 11, 16, 18, 23, 25, 27(8:30-12:30)

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maps not shown to scale

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- VN National University System Administrative Headquarters 11355 North Torrey Pines Road La Jolla, CA 92037-1011 (858) 642-8000
- VH National University Academic Headquarters 11255 North Torrey Pines Road La Jolla, CA 92037-1011 (858) 642-8800
- VT National University Library at Spectrum Business Park 9393 Lightwave Avenue San Diego, CA 92123-1447 (858) 541-7900
- VP Spectrum Business Park Campus 9388 Lightwave Avenue San Diego, CA 92123-1426 (858) 541-7700
- VJ South Bay Campus 660 Bay Boulevard, Suite 110 Chula Vista, CA 91910-5200 (619) 563-7415
- VA Mission Valley Campus 4121 Camino del Rio South San Diego, CA 92108-4103 (619) 563-7241
- VO La Mesa Campus 7787 Alvarado Road La Mesa, CA 91941-3643 (619) 337-7500
- NB Carlsbad Campus 705 Palomar Airport Road, Suite 150 Carlsbad, CA 92009-1029 (760) 268-1500
- NR Rancho Bernardo Campus 16875 West Bernardo Drive, Suite 150 San Diego, CA 92127-1675 (858) 521-3900

#### **MILITARY LEARNING CENTERS**

- V2 Marine Corps Air Station Miramar Learning Center Building 5305 San Diego, CA 92145 (619) 563-7355
- V3 Naval Air Station North Island Learning Center Building 650 San Diego, CA 92135-7024 (619) 563-7478
- V5 Naval Base San Diego Learning Center Building 151 San Diego, CA 92136-5000 (619) 563-7474

- V6 Fleet AntiSubmarine Warfare Training Learning Center Building 7 San Diego, CA 92147-5090 (619) 563-7488
- VF Naval Base Coronado Learning Center Building 650 San Diego, CA 92135-7024 (619) 563-7478
- VM Marine Corps Recruit Depot Learning Center Building 111 San Diego, CA 92140-5000 (619) 563-7482
- V8 Naval Submarine Base Admissions Office 140 Sylvester Road, Building 140 San Diego, CA 92106-3521 (619) 563-7490
- V4 Naval Hospital Admissions Office Building 26, Room 115 San Diego, CA 92134-5000 (619) 563-7470
- VV Marine Corps Base Camp Pendleton Learning Center Building 1331 Camp Pendleton, CA 92055-5020 (760) 268-1533
- PN Twentynine Palms Learning Center Marine Air Ground Task Force Training Center Building 1526, P.O. Box 6051 Twentynine Palms, CA 92278-1118 (760) 830-6887
- GL Naval Base Bremerton Admissions Office 2255 Cole Avenue Building 853, Room 106 Bremerton, WA 98314 (360) 476-8428

#### SAN BERNARDINO COUNTY

- OS San Bernardino Campus 804 East Brier Drive San Bernardino, CA 92408-2815 (909) 806-3300
- OT Ontario Campus 3800 E Concours, Suite 150 Ontario, CA 91764-5904 (909) 919-7600

#### LOS ANGELES COUNTY

- LA Los Angeles Campus 5245 Pacific Concourse Drive, Suite 100 Los Angeles, CA 90045-6905 (310) 662-2100
- LS Sherman Oaks Campus 14724 Ventura Boulevard, Suite 801 Sherman Oaks, CA 91403-3501 (818) 817-2460

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CV Camarillo Campus 761 East Daily Drive, Suite 120 Camarillo, CA 93010-0767 (805) 437-3000

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- OB Orange Campus 765 The City Drive South, Suite 207 Orange, CA 92868-4942 (714) 429-5300
- OP Costa Mesa Campus 3390 Harbor Boulevard Costa Mesa, CA 92626-1502 (714) 429-5100

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FS Fresno Campus 20 River Park Place West Fresno, CA 93720-1551 (559) 256-4900

#### SANTA CLARA COUNTY

JS San Jose Campus 3031 Tisch Way, 100 Plaza East San Jose, CA 95128-2541 (408) 236-1100

#### SAN JOAQUIN COUNTY

SQ Stockton Campus 3520 Brookside Road Stockton, CA 95219-2319 (209) 475-1400

#### SACRAMENTO COUNTY

ST Sacramento Campus 9320 Tech Center Drive Sacramento, CA 95826-2558 (916) 855-4100

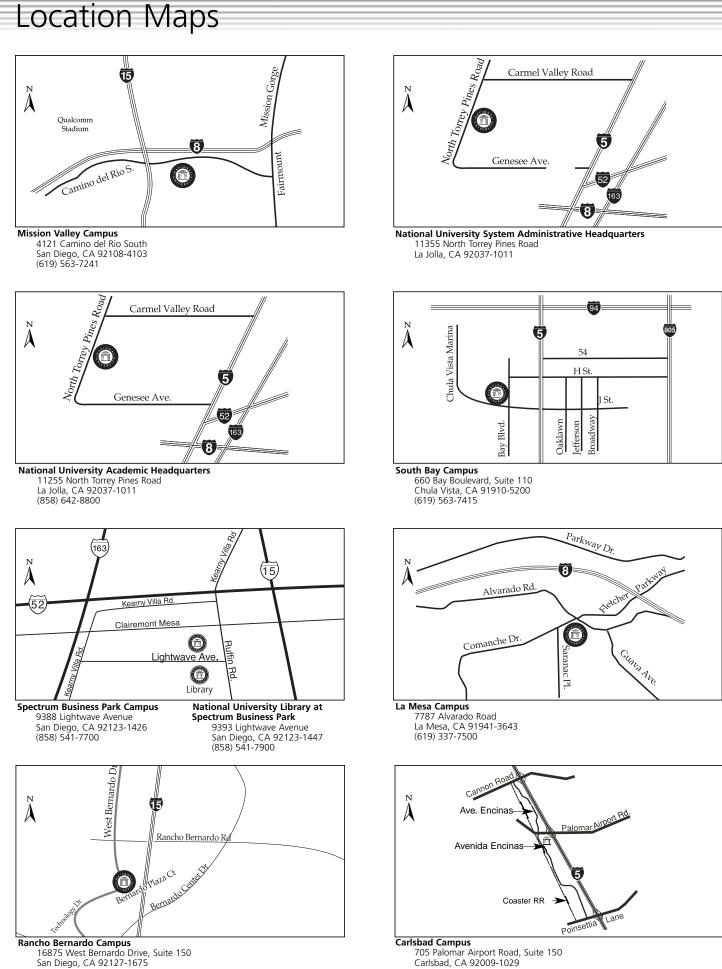
#### SHASTA COUNTY

SR Redding Campus 2195 Larkspur Lane, Suite 200 Redding, CA 96002-0629 (530) 226-4000

#### NEVADA

GN Henderson, Nevada Campus 2850 West Horizon Ridge Parkway Suite 301 Henderson, NV 89052-4395 (702) 531-7800

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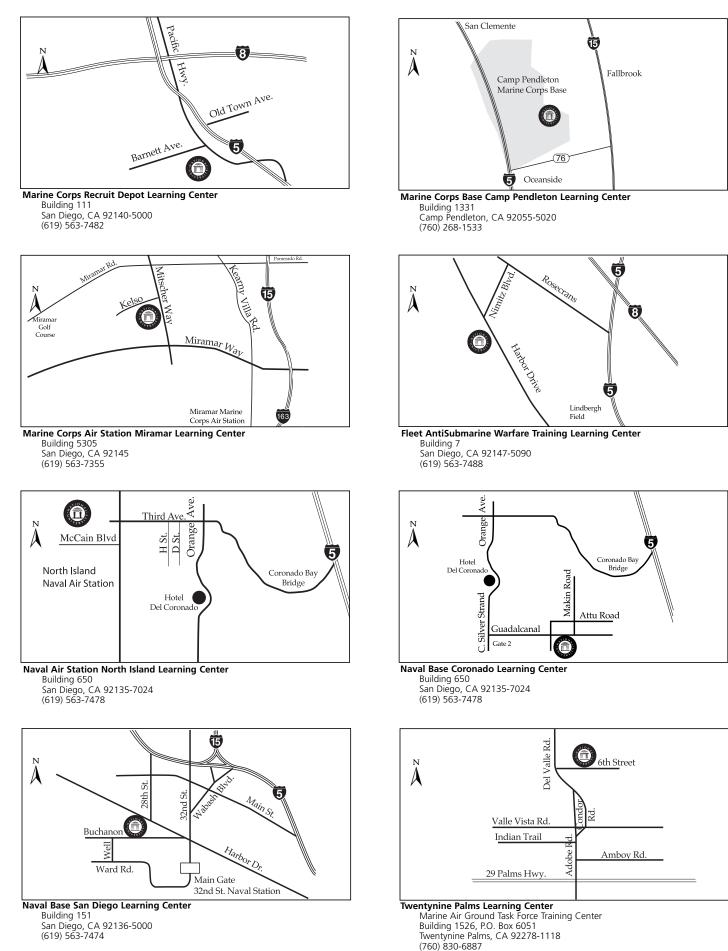


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16875 West Bernardo Drive, Suite 150 San Diego, CA 92127-1675 (858) 521-3900

## Location Maps

Locations



## Departments

Academic Affairs 11355 North Torrey Pines Road, La Jolla, CA 92037-1011 (858) 642-8592 • Fax: (858) 642-8708 Accounts Payable (858) 642-8573 • Fax: (858) 642-8723 Administration and Business 11355 North Torrey Pines Road, La Jolla, CA 92037-1011 (858) 642-8593 • Fax: (858) 642-8711 Admissions (800) NAT UNIV (628-8648) E-mail: advisor@nu.edu Advancement and Alumni Relations 11355 North Torrey Pines Road, La Jolla, CA 92037-1011 (858) 642-8093 • Fax: (858) 642-8705 alumni@nu.edu development@nu.edu Articulations 11355 North Torrey Pines Road, La Jolla, CA 92037-1011 (858) 642-8260 E-mail: registrar@nu.edu Bookstore (National University TextDirect) 1 (866) 243-0077 E-mail: Nutextdirect@bkstr.com Website: www.nutextdirect.com Career Center 9393 Lightwave Avenue, San Diego, CA 92123-1447 (858) 541-7950 • Fax: (858) 541-7996 E-mail: careerservices@nu.edu **College of Letters and Sciences** 11255 North Torrey Pines Road, La Jolla, CA 92037-1011 (858) 642-8450 • Fax: (858) 642-8715 **Communications Group** 11355 North Torrey Pines Road, La Jolla, CA 92037-1011 (858) 642-8235 • Fax: (858) 642-8706 Conference Facilities 9388 Lightwave Avenue, San Diego, CA 92123-1447 San Diego, CA 92123 • (858) 541-7727 Copy / Postal Services 11255 North Torrey Pines Road, La Jolla, CA 92037-1011 (858) 642-8160 • Fax: (858) 642-8725 Credentials E-mail: credentials@nu.edu • Fax: (858) 642-8717 **English Language Programs** 9388 Lightwave Avenue, San Diego, CA 92123-1447 (858) 541-7960 • Fax: (858) 541-7995 E-mail: elp@nu.edu Evaluation (858) 642-8260 • Fax: (858) 642-8721 E-mail: evaluations@nu.edu Extended Learning 11255 North Torrey Pines Road, La Jolla, CA 92037-1011 (858) 563-8600 • Fax: (858) 563-8714 Financial Aid 11355 North Torrey Pines Road, La Jolla, CA 92037-1011 (858) 642-8500 • Fax: (858) 642-8720 E-mail: finaidinfo@nu.edu General Information (619) 563-7100 or 1 (800) NAT-UNIV (628-8648) Grades and Attendance (858) 642-8260 • Fax: (858) 642-8718 E-mail: grades@nu.edu Graduation (858) 642-8260 • Fax: (858) 642-8721 E-mail: graduation@nu.edu Human Resources 11355 North Torrey Pines Road, La Jolla, CA 92037-1011 (858) 642-8195 • Fax: (858) 642-8713 Information and Community Relations 11255 North Torrey Pines Road, La Jolla, CA 92037-1011 (858) 642-8163 • Fax: (858) 642-8710

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#### Mark Moses Associate Vice President

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#### Rancho Bernardo

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#### Dominick Giovanniello

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#### Chula Vista (South Bay)

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#### La Mesa

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#### **Mission Valley**

4121 Camino del Rio South San Diego, CA 92108-4103 (619) 563-7241

#### Spectrum Business Park

9388 Lightwave Avenue San Diego, CA 92123-1426 (858) 541-7700

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4121 Camino del Rio South San Diego, CA 92108-4103 (619) 563-7288 Fax: (619) 563-7211 E-mail: jwilson@nu.edu

#### Douglas Barr

Associate Regional Dean, Military M.B.A. National University

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Locations

**Naval Air Station North Island** Building 650 San Diego, CA 92135-7024 (619) 563-7478

#### Naval Base Coronado

Building 650 San Diego, CA 92155-5000 (619) 563-7492

#### Naval Base San Diego

Building 151 San Diego, CA 92136-5000 (619) 563-7474

Marine Corps Air Station Miramar Building 5305 San Diego, CA 92145 (619) 563-7355

Marine Corps Base Camp Pendleton Building 1331 Camp Pendleton, CA 92055-5020 (760) 268-1533

#### Marine Corps Recruit Depot Building 111

San Diego, CA 92140-5000 (619) 563-7482

Twentynine Palms Center Marine Air Ground Task Force Building 1526, P.O. Box 6051 Twentynine Palms, CA 92278-1118 (760) 830-6887

#### Admissions Offices

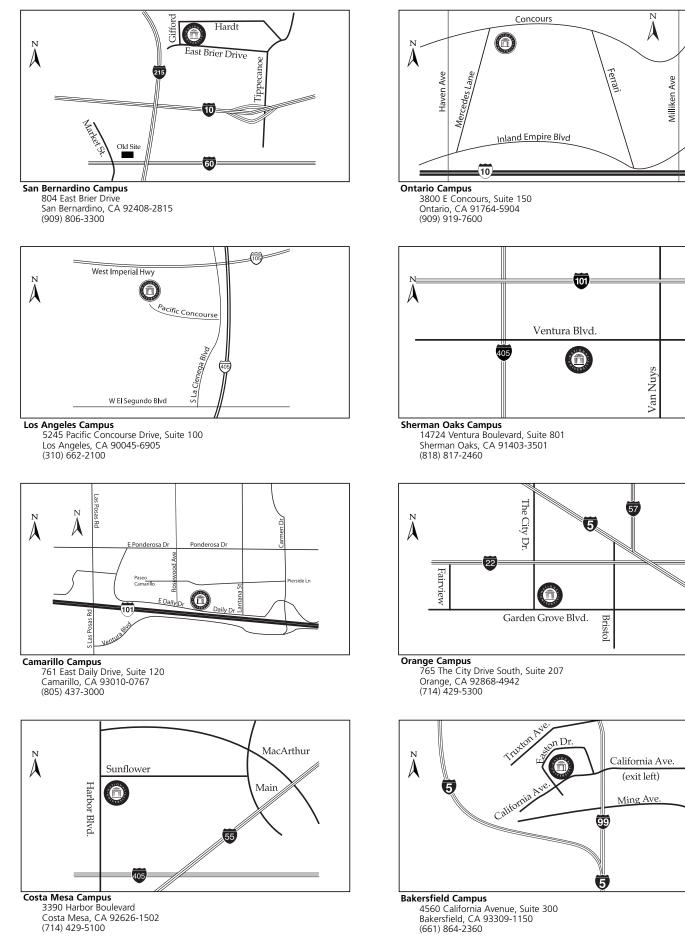
Naval Base Bremerton Admissions Office 2255 Cole Avenue Building 853, Room 106 Bremerton, WA 98314 (360) 476-8428

Naval Hospital Admissions Office Building 26, Room 115 San Diego, CA 92134-5000 (619) 563-7470

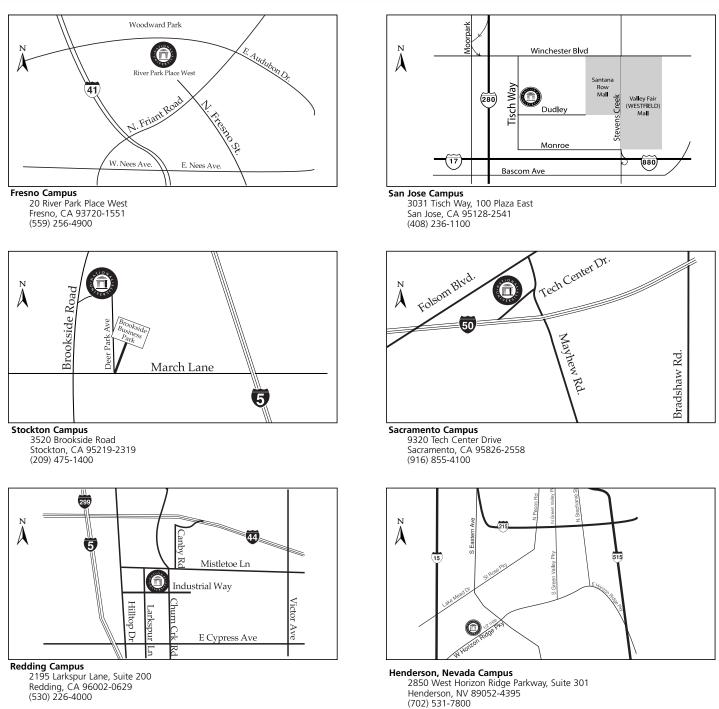
Naval Submarine Base Admissions Office 140 Sylvester Road, Building 140 San Diego, CA 92106-3521 (619) 563-7490

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## Location Maps



## Location Maps



Locations

## Southern California Campus Administration

Mahvash Yadegarpour, Associate Vice President, Regional Operations, 5245 Pacific Concourse Drive, Los Angeles, CA 90045, (310) 662-2101

#### Mahvash Yadegarpour Associate Vice President Ed.D., University of La Verne Los Angeles Campus Los Angeles Campus 5245 Pacific Concourse Drive Los Angeles, CA 90045 (310) 662-2101 • Fax: (310) 662-2098 Academic Department (310) 662-2102 Administration (310) 662-2000 Admissions (310) 662-2000 Fax: (310) 662-2095 Bookstore (National University TextDirect) 1 (866) 243-0077 E-mail: Nutextdirect@bkstr.com Website: www.nutextdirect.com Business Office/Student Accounts (310) 662-2030, 2031, 2032, 2033, College of Letters and Sciences (310) 662-2000 Fax: (310) 662-2110 Conference Facilities (310) 662-2060 Credential Advisor (310) 662-2052, 2053, 2054, 2050 Financial Aid (310) 662-2021, 2022 Library Information Center (310) 662-2180 Fax: (310) 662-2097 School of Business and Management (310) 662-2000 Fax: (310) 662-2110 School of Education (310) 662-2000 Fax: (310) 662-2110

#### Sherman Oaks Campus

14724 Ventura Boulevard, Suite 801 Sherman Oaks, CA 91403-3501 (818) 817-2460 Fax: (818) 817-2468

Admissions (818) 817-2460 Fax: (818) 817-2468 Bookstore (National University TextDirect) 1 (866) 243-0077 E-mail: Nutextdirect@bkstr.com Website: www.nutextdirect.com David Waller Associate Regional Dean M.A. in Counseling Psychology National University

#### Costa Mesa Campus

3390 Harbor Boulevard Costa Mesa, CA 92626-1502 (714) 429-5100 • Fax: (714) 429-5396

Academic Department (714) 429-5102 Fax: (714) 429-5397 Admissions (714) 429-5100 Fax: (714) 429-5220 Bookstore (National University TextDirect) 1 (866) 243-0077 E-mail: Nutextdirect@bkstr.com Website: www.nutextdirect.com Business Office/Student Accounts (714) 429-5171 College of Letters and Sciences (714) 429-5100 Fax: (714) 429-5176 Computer Lab (714) 429-5122 Conference Facilities (714) 429-5280 Credential Advisor (714) 429-5403 **Educational Services** (714) 429-5280 Financial Aid (714) 429-5175 Library Information Center (714) 429-5180 Fax: (714) 429-5399 School of Business and Management (714) 429-5100 Fax: (714) 429-5397 School of Education (714) 429-5100 Fax: (714) 429-5397 School of Engineering and Technology (714) 429-5100 Fax: (714) 429-5397 School of Health and Human Services (714) 429-5100 Fax: (714) 429-5397 School of Media and Communication (714) 429-5100 Fax: (714) 429-5397

#### Orange Campus

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Admissions (714) 429-5300 Fax: (714) 429-5307 Bookstore (National University TextDirect) 1 (866) 243-0077 E-mail: Nutextdirect@bkstr.com Website: www.nutextdirect.com Business Office/Student Accounts (714) 429-5308 Financial Aid (714) 429-5303 Mark Redfern Associate Regional Dean M.B.A., National University

**Camarillo Campus** 761 East Daily Drive, Suite 120 Camarillo, CA 93010-0767 (805) 437-3000 • Fax: (805) 437-3096

Bookstore (National University TextDirect) 1 (866) 243-0077 E-mail: Nutextdirect@bkstr.com Website: www.nutextdirect.com

#### Olivia Horton

Associate Regional Dean M.A. in Human Behavior National University

**San Bernardino Campus** 804 East Brier Drive San Bernardino, CA 92408-2815 (909) 806-3300 • Fax: (909) 806-3341

Admissions (909) 806-3300 Fax: (909) 806-3398 Bookstore (National University TextDirect) 1 (866) 243-0077 E-mail: Nutextdirect@bkstr.com Website: www.nutextdirect.com Business Office/Student Accounts (909) 806-3310 Credential Advisor (909) 806-3332 Fax: (909) 806-3398 Financial Aid (909) 806-3375 Library Information Center (909) 806-3381 Fax: (909) 806-3380 College of Letters and Sciences (909) 806-3334 School of Business and Management (909) 806-3343 School of Education (909) 806-3335 **Ontario Campus** 

3800 E Concours Drive, Suite 150 Ontario, CA 91764-5904 (909) 919-7600 • Fax: (909) 919-7698

Admissions (909) 919-7600 Fax: (909) 919-7698 Bookstore (National University TextDirect) 1 (866) 243-0077 E-mail: Nutextdirect@bkstr.com Website: www.nutextdirect.com Business Office/Student Accounts (909) 919-7622 Credential Advisor (909) 806-3332 Fax: (909) 806-3398 Financial Aid (909) 919-7622 Fax: (909) 806-3380 College of Letters and Sciences (909) 919-7633 School of Business and Management (909) 919-7631 School of Education (909) 919-7632

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## Northern California Campus Administration

Roland Jones, Associate Vice President, Regional Operations, 20 River Park Place West, Fresno, CA 93720, (559) 256-4900

#### Roland Jones Associate Vice President M.A. in Management National University

**Fresno Campus** 20 River Park Place West Fresno, CA 93720-1551 (559) 256-4900 • Fax: (559) 256-4992

Academic Department (559) 256-4930 Fax: (559) 256-4996 Administrative Services (559) 256-4910 Admissions (559) 256-4900 Fax: (559) 256-4992 Bookstore (National University TextDirect) 1 (866) 243-0077 E-mail: Nutextdirect@bkstr.com Website: www.nutextdirect.com Business Office/Student Accounts (559) 256-4913 Fax: (559) 256-4993 College of Letters and Sciences (559) 256-4934 **Conference Facilities** (559) 256-4954 Credential Advisor (559) 256-4932 Financial Aid (559) 256-4929 Library Information Center (559) 256-4951 School of Business and Management (559) 256-4934 School of Education (559) 256-4934

#### **Bakersfield Campus** 4560 California Avenue, Suite 300 Bakersfield, CA 93309-1150 (661) 864-2360 • Fax: (661) 864-2368 Administration (661) 864-2363 Admissions (661) 864-2360 Bookstore (National University TextDirect) 1 (866) 243-0077 E-mail: Nutextdirect@bkstr.com Website: www.nutextdirect.com Business Office/Student Accounts (661) 864-2371 College of Letters and Sciences (661) 864-2381 **Conference Facilities** (661) 864-2360 Credential Advisor (661) 864-2370 Financial Aid (661) 864-2371

School of Education

(661) 864-2383

Sacramento, CA 95826-2558 (916) 855-4100 • Fax: (916) 855-4295

Mary Emery-Sherman

M.A. in Management

Sacramento Campus

9320 Tech Center Drive

National University

Associate Regional Dean

Academic Department (916) 855-4309 Fax: (916) 855-4398 Admissions (916) 855-4100 Fax: (916) 855-4295 Bookstore (National University TextDirect) 1 (866) 243-0077 E-mail: Nutextdirect@bkstr.com Website: www.nutextdirect.com Business Office/Student Accounts (916) 855-4161 Fax: (916) 855-4395 Cafeteria (916) 855-4285 **Conference Facilities** (916) 855-4131 **Educational Services** (916) 855-4131 College of Letters and Sciences (916) 855-4309 Copy/Postal Services (916) 855-4195 Credential Advisor (916) 855-4304 and 4307 Financial Aid (916) 855-4175 and 4176 Library Information Center (916) 855-4180 Fax: (916) 855-4396 School of Business and Management (916) 855-4309 School of Education (916) 855-4309 Student Teaching Placement (916) 855-4305

#### John D. Athan Associate Regional Dean M.A. in Leadership

Saint Mary's College of California

**Stockton Campus** 3520 Brookside Road Stockton, CA 95219-2319 (209) 475-1400 • Fax: (209) 475-1498

Admissions (209) 475-1400 Fax: (209) 475-1498 Bookstore (National University TextDirect) 1 (866) 243-0077 E-mail: Nutextdirect@bkstr.com Website: www.nutextdirect.com Business Office/Student Accounts (209) 475-1410 Credential Advisor (209) 475-1431

#### Charlene Ashton Associate Regional Dean

Ed.D., Learning and Instruction University of San Francisco

**San Jose Campus** 3031 Tisch Way, 100 Plaza East San Jose, CA 95128-2541 (408) 236-1100 • Fax: (408) 236-1196

Academic Department (408) 236-1130 Fax: (408) 236-1195 Administration (408) 236-1101 Fax: (408) 236-1196 Admissions (408) 236-1100 Fax: (408) 236-1196 Bookstore (National University TextDirect) 1 (866) 243-0077 E-mail: Nutextdirect@bkstr.com Website: www.nutextdirect.com Business Office/Student Accounts (408) 236-1124 Fax: (408) 236-1197 College of Letters and Sciences (408) 236-1137 Credential Advisor (408) 236-1117, 1140 Financial Aid (408) 236-1121 Library Information Center (408) 236-1180 School of Business and Management (408) 236-1138 School of Education (408) 236-1131 Student Teaching/Placement Coordinator (408) 236-1118

#### Bernell Hirning

Associate Regional Dean M.S. in Management Minot State University

Redding Campus

2195 Larkspur Lane, Suite 200 Redding, CA 96002-0629 (530) 226-4000 • Fax: (530) 226-4040

Admissions (530) 226-4000 Administration (530) 226-4001 Bookstore (National University TextDirect) 1 (866) 243-0077 E-mail: Nutextdirect@bkstr.com Website: www.nutextdirect.com Business Office/Student Accounts (530) 226-4011 College of Letters and Sciences (530) 226-4003 Credential Advisor (530) 226-4008 Financial Aid (530) 226-4011 School of Education (530) 226-4012 School of Business and Management (530) 226-4005 Student Teaching Placement (530) 226-4015

## Nevada Campus Administration

Mahvash Yadegarpour, Associate Vice President, Regional Operations, 5245 Pacific Concourse Drive, Los Angeles, CA 90045, (310) 662-2101

Tracy McMurry Associate Regional Dean M.A. in Counseling Psychology M.S. in Educational Counseling National University

#### Henderson, Nevada Campus 2850 West Horizon Ridge Parkway, Suite 301 Henderson, NV 89052-4395 (702) 531-7800 • Fax: (702) 531-7894

Admissions (702) 531-7800 Fax: (702) 531-7894 Bookstore (National University TextDirect) 1 (866) 243-0077 E-mail: Nutextdirect@bkstr.com Website: www.nutextdirect.com Business Office/Financial Aid (702) 531-7822 Fax: (702) 531-7894 School of Business and Management (702) 531-7832 Fax: (702) 531-7895 School of Education (702) 531-7834 Fax: (702) 531-7895 School of Health and Human Services (702) 531-7831 Fax: (702) 531-7895

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The University of Values

## Degree Programs Offered at National University

### **Undergraduate Degrees**

#### Associate of Arts 🖑

with a Concentration in: Medical Billing, Coding, and Information Technology with Majors in: Healthcare Administration Rehabilitative Counseling

#### Associate of Science

with Majors in: Community Healthcare Worker Health Science and Pre-Nursing Nursing ^은 Licensed Vocational Nurse to Associate of Science in Nursing

#### **Bachelor of Arts**

with Majors in: Arabic Studies Broadcast Media 🖑 with Concentrations in: Broadcast Media Management Broadcast Media Production Chinese Studies Comparative Literature 🖑 Digital Entertainment and Interactive Arts 🖑 with Concentrations in: Cinematic Arts Digital Design and Web Development Video Game Art and Animation Video Game Production and Design Early Childhood Education with Concentrations in: Early Childhood Administration Teacher Education English 4 English with Single-Subject Matter Preparation English with a Preliminary Single Subject Credential (CA) General Studies Global Studies 🖑 History J Interdisciplinary Studies Interdisciplinary Studies Concentrating in Early Childhood Education with a Preliminary Multiple Subject Credential (CA) Interdisciplinary Studies with a Preliminary Multiple Subjects Teaching Credential (CA) Journalism 🖰 with Concentrations in: Broadcast Journalism Online/Print News Journalism Management A with Concentrations in: Alternative Dispute Resolution Business Law Economics Entrepreneurship Human Resource Management Marketing Sports Management Marketing *A* Mathematics with a Preliminary Single Subject Credential (CA) Persian Studies Political Science Pre-Law Studies Psychology ô Sociology 1

#### Bachelor of Business Administration ~

with Concentrations in: Accountancy 🖑 Alternative Dispute Resolution Business Law Economics Entrepreneurship Finance  $^{\oplus}$ Hospitality and Casino Management  $^{\oplus}$ Human Resources Management  $^{\oplus}$ Marketing  $^{\oplus}$ Sports Management  $^{\oplus}$ 

#### **Bachelor of Public Administration**

#### **Bachelor of Science**

with Majors in: Accountancy C Allied Health A Community Health Computer Science 🖑 Construction Engineering Technology 4 Construction Management 1 Criminal Justice Administration 🖑 Design Engineering Technology Domestic Security Management 4 Environmental Science and Policy Financial Management 🖑 Health Education Health Education with Preliminary Single Subject Credential (CA) Information Systems 1 Information Technology Management 78 Mathematics with Concentrations in: Mathematics and Applications Single-Subject Teaching Natural Sciences with Concentrations in: Earth Science Life Science Nursing 🖑 Nursing Accelerated Post-Bachelor Degree 🖑 Nursing (Licensed Vocational Nurse/Licensed Practical Nurse) to BSN Nursing (RN Completion) 1 Organizational Behavior Organizational Leadership Paralegal Studies with Certificates and Specializations in: Legal Assistance Certificate Paralegal Specialist Certificate Litigation Specialization Corporations Specialization Real Estate Law Specialization Probate and Estate Planning Specialization Criminal Law Specialization Family Law Specialization Physical Education Physical Education with Preliminary Single Subject Credential (CA)

Foreign Credential Bridge Program

### **Graduate Degrees**

Executive Master in Business Administration 🖑

Executive Master in Business Administration (Spanish Version)

Master of Arts with Fields of Study in: Counseling Psychology English ~ Health Education Human Behavior Human Resource Management 4 with Areas of Specialization in: Organizational Development and Change Management A Organizational Leadership Management 4 with an Area of Specialization in: Organizational Leadership 1 Strategic Communications Teaching with Areas of Specialization in: Autism Applied Behavioral Analysis Best Practices Early Childhood Education Specialization/Certificate Early Childhood Special Education Educational Technology National Board Certified Teacher Leadership Reading Special Education Teacher Leadership Teaching and Learning in a Global Society

## Degree Programs Offered at National University

#### Master of Business Administration ~

with Areas of Specialization in:

Accountancy °C Alternative Dispute Resolution Electronic Business °C Financial Management °C Health Care Administration Human Resources Management °C International Business °C Marketing °C Organizational Leadership °C Technology Management

#### Master of Education 🕆

Specializing in: Best Practices Crosscultural Teaching with Fields of Study in: Elementary Education with Nevada Licensure Secondary Education with Nevada Licensure Teaching

#### Master of Fine Arts 🖑

with Fields of Study in: Creative Writing ኅ Digital Cinema ኅ Video Game Production and Design ኅ

#### Master of Forensic Sciences -

with Areas of Specialization in: Criminalistics Investigation プ

#### Master of Health Care Administration -

#### Master of Public Administration ~

with Areas of Specialization in: Alternative Dispute Resolution Human Resources Management ^ Organizational Leadership ^ Public Finance ~

#### Master of Science

with Fields of Study in: Applied School Leadership (in partnership with Santa Clara County Office of Education) Clinical Regulatory Affairs Community Health Computer Science Corporate and International Finance Database Administration Educational Administration A Educational Counseling Educational and Instructional Technology with Specializations in: K-12 and Higher-Education Classrooms Corporate, Military, and Government Training Electronic Business Engineering Management 🖑 with Areas of Specialization in: Enterprise Architecture Lean Six Sigma Project Management Supply Chain Management and e-Logistics **Environmental Engineering** Exceptional Student Education Finance Homeland Security and Safety Engineering 5 Information Systems Instructional Leadership Knowledge Management Organizational Leadership 🕆 School Psychology Software Engineering Special Education 1 Special Education with an Emphasis in the Deaf and Hard-of-Hearing Special Education with Nevada Licensure Systems Engineering with Areas of Specialization in: **Engineering Management** Enterprise Architecture Industrial Engineering Software Engineering Technology Management " Wireless Communications

### **California Credentials**

(Approved by the Commission on Teacher Credentialing)

Preliminary Multiple Subject Teaching Credential Program with BCLAD Option Preliminary Single Subject Credential Program with BCLAD Option Holders of a Ryan Credential with clad and AB 1059 Holders of a Preliminary 2042 MS/SS Teaching Credential Intern Credential Program for Multiple Subject/Single Subject Teaching Advanced 5th Year Study - Clear SB 2042 Credential Preliminary Tier I Administrative Services Certificate/Credential Internship - Preliminary Administrative Services Credential - Tier I Professional (Tier II) Administrative Services Credential Pupil Personnel Services Credential School Counseling (PPSC) Pupil Personnel Services Credential School Psychology (PPSP) Preliminary Level I Education Specialist Credential: DHH with CLAD Certificate Preliminary Level I Education Specialist Credential: DHH with Multiple or Single subject credential Preliminary Level I Education Specialist Credential: Mild/Moderate Disabilities with CLAD Certificate Preliminary Level I Education Specialist Credential: Moderate/Severe Disabilities with CLAD Certificate Preliminary Level I Education Specialist: Mild/Moderate Disabilities with Multiple or Single Subject Credential Concurrent with BCLAD option Preliminary Level I Education Specialist: Moderate/Severe Disabilities with Multiple or Single Subject Concurrent Credential with BCLAD option **Special Education Internships:** Professional Level I Education Specialist Credential: DHH Professional Level I Education Specialist Credential: Mild/Moderate

#### Disabilities Professional Level I Education Specialist Credential: Moderate/Severe Disabilities

Professional Level II Education Specialist: Mild/Moderate Disabilities Professional Level II Education Specialist: Moderate/Severe Disabilities

### **Certificate Programs**

Accountancy 🖑 Alternate Dispute Resolution Applied Behavior Analysis Autism Behavioral Analysis CA Reading 🖑 CLAD d Corporations Specialization Criminal Justice Administration 4 Criminal Law Specialization Early Childhood Early Childhood Special Education Educational Technology " Electronic Business ~ Family Law Specialization Finance 🖑 Hospitality and Casino Management 🖑 Human Resources Management 4 Industrial Engineering Information Technology Management & International Business Lean Six Sigma Legal Assistance Litigation Specialization LVN "30 Unit" Option Certificate Marketing 🖑 National Board Certified Teacher Leadership Paralegal Specialist Probate and Estate Planning Specialization Project Management J Real Estate Law Specialization Security and Safety Engineering 🖑 Sports Management 4 Supply Chain Management and e-Logistics 🖑 Teaching in Diverse Learning Settings

<sup>•</sup><sup>®</sup> denotes program also offered or partially offered online. Note: Not all online programs or courses are offered in entirety via Internet. Note: Not all courses or programs listed in this catalog are available at every campus. Various undergraduate minors are available in some degree programs. Consult the appropriate school listing for more complete information.

## **General Information**

## **Mission Statement**

National University is dedicated to making lifelong learning opportunities accessible, challenging, and relevant to a diverse student population. Its aim is to facilitate educational access and academic excellence through exceptional management of University operations and resources, innovative delivery systems and student services, and relevant programs that are learner-centered, successoriented, and responsive to technology.

National University's central purpose is to promote continuous learning by offering a diversity of instructional approaches, by encouraging scholarship, by engaging in collaborative community service, and by empowering its constituents to become responsible citizens in an interdependent, pluralistic, global community.

## **General Description**

National University is the second-largest, private, nonprofit institution of higher learning in California. The University is geographically dispersed, with its academic and administrative centers located in La Jolla, California. These centers include all administrative offices—the offices of the president, vice presidents, school deans and department chairs, financial aid, registrar and admissions.

From its administrative center, National University supports a variety of campuses, making learning convenient for its students.

| Campuses        | San Bernardino    | MCAS Miramar     |
|-----------------|-------------------|------------------|
| Bakersfield     | San Jose          | MCRD San Diego   |
| Camarillo       | Sherman Oaks      | NAB Coronado     |
| Carlsbad        | South Bay         | Naval Base San   |
| Costa Mesa      | Spectrum          | Diego            |
| Fresno          | Stockton          | NAS North Island |
| Henderson, NV   |                   | Twentynine Palms |
| La Mesa         | Military          |                  |
| Los Angeles     | Locations         | Admissions       |
| Ontario         | ASW (Fleet Anti-  | Offices          |
| Orange          | Submarine         | Bremerton,       |
| Rancho Bernardo | Warfare)          | Washington       |
| Redding         | Marine Corps Base | San Diego,       |
| Sacramento      | Camp Pendleton    | California       |

## **Accreditation/Memberships**

Since 1977, National University has been accredited by the Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges (WASC).

The University is also:

- Approved by the Commission on Teacher Credentialing (CTC)
- Accredited by the California Board of Registered Nursing (BRN)
  Approved by the Commission on Collegiate Nursing Education (CCNE) for the offering of the Bachelor of Science in Nursing
- Program
  Accredited by the International Assembly for Collegiate Business Education (IACBE) for programs offered by the School of Business & Management
- A member of the American Association of Colleges for Teacher Education (AACTE)
- Approved to train veterans under Title 38, U.S. Code (GI Bill)
- Approved for student financial aid by the Department of Education

- A member of the Council of Colleges of Arts and Sciences (CCAS)
- Authorized under federal law to enroll non-immigrant alien students
- A member of the American Association of Intensive English Programs (AAIEP) through its American Language and Intercultural Studies program
- A participant in the Servicemembers Opportunity College network (SOC)
- Approved for Army, Air Force, Coast Guard, Marine Corps, Navy and U.S. government tuition assistance. Students in San Diego who qualify may enroll in the Army or Air Force ROTC cross-enrollment programs.

The Division of Extended Learning is a member of the following organizations:

- The International Association for Continuing Education and Training (IACET) as an Authorized Provider of the Continuing Education Unit (CEU)
- The University Continuing Education Association (UCEA)
- The Association for Continuing Higher Education (ACHE)
- The Learning Resources Network (LERN)

## **Granting of Credit**

The academic year is divided into four 12-week quarters, each comprised of three one-month classes. (Refer to the Financial Aid section for a definition of the academic year used for financial aid calculations.) Students may enroll in classes in most programs any month of the year. National University awards credit in quarter units. Under the current policy, 4.5 units of credit are awarded for most courses. A unit of credit is based upon the hours of classroom instruction for each course and the hours that a typical student reasonably should expect to devote preparing for each hour of class. An undergraduate course requires 45 hours of classroom instruction and an undergraduate student generally is expected to devote two hours or more in outside preparation for each hour of class. A graduate course requires 40 hours of classroom instruction and a graduate student generally is expected to devote three hours or more in outside preparation for each hour of class. Undergraduate courses typically are scheduled for a one-month period, generally for 4.5 hours on two weekdays and 4.5 hours on two Saturdays during the month. Graduate courses typically are scheduled for a one-month period, generally 4.5 hours two weekday nights with a 4.5-hour session on one Saturday.

## Faculty

There are four tiers of faculty at National University—full-time, associate, core adjunct, and adjunct.

FULL-TIME FACULTY are members of the University whose primary responsibilities include teaching, scholarship, service, intellectual coordination with the part-time faculty, professional development, student advising and participation in the University's governance.

ASSOCIATE FACULTY are teachers who make a half-time commitment to the University faculty over the course of the year. They are contracted to teach a designated number of courses per year, advise students on course, program, or career-related issues, participate in departmental, school and University activities and engage in scholarship relevant to their teaching.

CORE ADJUNCT FACULTY are teachers whose principal professional commitments are elsewhere in their fields, but who are contracted to teach a designated number of courses per year, advise

**General Information** 

students on course-related topics, and maintain currency in their professional and disciplinary fields.

ADJUNCT FACULTY teach one course at a time, advise students on course-related topics and participate in faculty development activities without a need for deeper commitment to other aspects of University life.

All levels of faculty hold advanced degrees in their areas of expertise and are respected professionals with many years of career experience. Learning is facilitated through lectures, outside reading, class discussions, case studies and research projects relating to problems within students' interests.

The extensive knowledge of adult learners and the diversity of their backgrounds add a level of richness to the group-learning experience. The average age of students attending the University is 33.

## Familiarity with University Regulations

When signing an enrollment agreement, students acknowledge receipt of the General Catalog and agree to abide by the policies, rules, and regulations of the University. When students enrolling through the Internet checkmark the box on the online agreement constituting a virtual signature, they acknowledge that they are bound by the policies, rules, and regulations of the University contained in this catalog. This publication includes academic standards and the general requirements for graduation. Ignorance of or lack of familiarity with this information does not serve as an excuse for noncompliance or infractions. The University provides assistance in the form of academic advising, but students are responsible for meeting the published requirements of their respective programs.

## National University Community Research Institute (NUCRI)

The National University Community Research Institute (NUCRI) is an outgrowth of the 1997 President's Commission on Community. A major outcome of the commission was to envision the University's collaborative future as a full community partner. Community became an institutional core value and NUCRI developed into a universitywide, point of contact for making the university-community connection across disciplines and facilitating community research and technology applications for smart and creative community building.

The academically-oriented and practitioner-based Institute focuses on community research and technology, knowledge sharing, professional development, educational outreach and service. Through its University Consultant Corps of faculty, students, and community practitioners NUCRI engages in collaborative research and innovative technology transfer initiatives with strategic alliances to pursue its mission. The overarching goal is to enhance community capacity building and involvement for sustainable community development.

## **Military Community**

National University has seven convenient locations for the military community in San Diego County, and one in San Bernardino County. Centers are located at Naval Base San Diego, Anti-Submarine Warfare Training Center San Diego, Naval Air Station North Island, Marine Corps Recruit Depot San Diego, Marine Corps Air Station Miramar, Marine Corps Base Camp Pendleton, and Marine Corps Air Ground Combat Center Twentynine Palms. National University also has admissions offices at Naval Hospital and Naval Submarine Base in San Diego, and at Naval Base Bremerton, Washington.

National University offers reduced tuition for classes on base for qualified students, including: active duty members, their spouses and dependents, Department of Defense employees, military retirees and selective military reserve members. The University accepts DANTES tests offered through the military voluntary education program. National University is a member of the Servicemembers Opportunity Colleges (SOC) network, and participates in the Military Installation Voluntary Education Review (MIVER).

## **General Fees**

Fees are non-refundable.

| All records and services are withheld from students who have any<br>outstanding financial obligations to the University or have defaulted<br>on a Title IV loan at the University. |
|--|
| Application Fee  |
| Non-Degree Application Fee   |
| Re-admission Fee   |
| Graduation Processing Fee\$100<br>Charged to all students before graduation.   |
| Transcript Fee    \$5      Per copy fee for each transcript (Academic or Extended Learning)  |
| Returned Check Charge\$20  |
| Reinstatement Fee\$100<br>Charged only to those students with unpaid delinquent financial<br>obligations.  |
| Late Payment Fee   |
| Credit by Examination Fee\$100<br>Per examination, per course.   |
| Challenge Examinations Fee   |
| Nursing Orientation Day Fee\$1,500   |
| Nursing Theory Course (NSG) Fee\$250 per course  |
| Nursing Clinical Laboratory (NSG) Fee\$400 per course  |
| International Application Fee\$65  |
| E-Portfolio \$35 per year  |
| E-Portfolio Renewal Fee \$35 per year  |

## **General Information**

## <u>Tuition</u>

| Tuition rates in effect as of September 3, 2007. |                  |                |                  |  |  |  |  |  |
|--|------------------|----------------|------------------|--|--|--|--|--|
| Course Level                                     | 4.5 quarter unit | 3 quarter unit | 1.5 quarter unit |  |  |  |  |  |
| 100, 200, 300, 400                               | \$1215           | \$810          | \$405            |  |  |  |  |  |
| 500 (Undergrad)*                                 | \$1215           | \$810          | \$405            |  |  |  |  |  |
| 500 (Grad)*                                      | \$1377           | \$918          | \$459            |  |  |  |  |  |
| 600 & 700  | \$1377           | \$918          | \$459            |  |  |  |  |  |

\* Tuition for 500-level courses is charged according to students' degree programs.

Tuition is due and payable prior to the first class session of each course. Tuition not fully paid when due is subject to a late fee.

If a tuition payment check is returned due to insufficient funds, the University reserves the right to drop all current and future classes for that student. Students will be notified of this action and assessed a return check charge. The University may require students who have written multiple insufficient-fund checks to make all future payments by cashier's check, cash, or money order.

The University reserves the right to modify tuition at any time. Reduced tuition is available at designated military facilities for eligible students.

## **Enrollment Agreement**

Students must sign an enrollment agreement before beginning classes at National University. The agreement includes topics pertaining to tuition and fees, billing, attendance, financial assistance, payment options and other matters of enrollment. Contact an admissions advisor for further information.

## Payments and Release of Records

The University grants degrees and releases transcripts only after a student satisfies all financial obligations to the University. All records and services are withheld from students who have any outstanding financial obligations to the University or who have defaulted on a federal Perkins or NU-Help loan.

## Safety Program

National University is concerned about the safety of its students and employees and has instituted a University Safety Policy and an Injury and Illness Prevention Program. Students play an important role in ensuring that their classroom facilities are safe. Students should:

- Review fire, medical, and earthquake emergency procedures posted in each classroom and be prepared to respond accordingly
- Review emergency egress routes and know the location of fire extinguishers (posted in each classroom)
- Watch for any hazardous conditions and report them immediately to the center assistant

## **Campus Security**

In general, National University's campuses are situated in highly populated urban areas. As such, they are subject to the same security problems as other businesses in the area. To help prevent crime, students should:

- Lock their cars
- Never leave valuable items in their parked cars
- Return to their cars in the company of other students when they leave the classroom at night. If no other students are going in that direction, students should request that a security guard or the center assistant accompany them
- Take items of value with them when they leave a classroom, unless they are certain that the classroom will be locked or monitored while they are away
- Report anything that appears to be out of the ordinary (e.g., a stranger lingering in the area) immediately to the center assistant Safety procedures are posted at campuses and labs.

Students should never single-handedly try to stop a criminal in the act. Students should call for security or report the act by calling "911." When the emergency operator answers, students should give the operator their direct dial number, name, and specific location, including building and room number. (For students calling from La Mesa, South Bay, Marine Corps Recruit Depot, or any of the San Diego naval installations, the location displayed on the 911 emergency operator's console will be that of the central telephone switch unit in Mission Valley, rather than that of the caller.) If time permits, students should also notify the University operator by dialing "O," since it is possible the 911 emergency operator may try to contact them through the main University number.

If students are involved in or aware of any event that requires the attention of University administration, they should complete a "Report of Student/Visitor Incident or Injury," available through the center assistant, and follow the instructions.

Pursuant to the Campus Security Act of 1990, the University publishes the Annual Report on Campus Security that discloses information about campus safety policies, procedures, and crime statistics. This report is available on the University's website, and printed copies are available upon request to all current students and prospective students at each National University campus.

## **Conference Services**

National University offers conveniently located facilities available for conference needs at very competitive rates. The University's conference style classrooms are perfect for hosting seminars, conferences, off-site meeting, or training sessions in an academic atmosphere that is comfortable, focused and conducive to interaction and learning.

## Professional Development and Seminars

National University's Division of Extended Learning is an authorized provider of the Continuing Education Unit (CEU); benchmarked to International Association for Continuing Education and Training (IACET) standards. The IACET CEU is considered the hallmark of quality in continuing education and training. IACET CEUs enhance the credibility of professional development and training in disciplines, such as: education, engineering, accounting, legal, medical, Real Estate and others. National University provides many administrative services to support professional development events and conferences. These may be held at National University's campuses throughout California, client locations, online, or by real-time web seminars. Extended Learning documents CEUs with a certificate and/or an official National University transcript. For more information regarding professional excellence with NU CEUs, please call (858) 642-8607.

| Mathematics Tutoring                      |  |
|---|--|
| National University Library System (NULS) |  |
| Online Resources                          |  |
| Online Services                           |  |
| Writing Across the Curriculum             |  |
| Writing Centers                           |  |
| Bookstore                                 |  |
| English Language Programs                 |  |
| Transfer of Credits to Other Institutions |  |
| Student Support Services                  |  |
| Internet Student Access                   |  |
| Computer-Based Information Systems        |  |
| Student Concierge Services                |  |
| Students with Disabilities                |  |
| The Student Relations Coordinator (SRC)   |  |
| Career Center                             |  |
| Testing Services                          |  |
| Alumni Relations                          |  |
| Development                               |  |
| International Students Support Services   |  |
| Transcript Evaluation                     |  |
| Language Proficiency                      |  |
| Orientation for International Students    |  |



The University of Values

### **Mathematics Tutoring**

Tutoring services in the fields of mathematics, sciences, engineering and business mathematics, including help with calculator usage, Excel, SPSS and Minitab applications are included in the study assistance extended to National University students.

Mathematics tutors are available free of charge to National University students. Since the request for help is online, any student from any NU academic center can avail of this student service. Tutors are available Monday through Thursdays afternoons and evenings and by appointment on weekends. Students who need assistance are required to complete a Math Tutor Help Request Form available online in the NU Home Page under Academics, Student Services. When the request form is received by the NU Math Center, a math tutor is assigned to contact the student and arrangements can then be made between Math Tutor and student.

### National University Library System (NULS)

NULS is comprised of the Central Library in San Diego and offers a wide range of online resources and services designed to meet the needs of online students and those at National University campuses.

The Central Library Spectrum Business Park 9393 Lightwave Ave. San Diego, CA 92123 USA (858) 541-7900 or 1-866-NU ACCESS (682-2237) "Library"

| 10 a.m. – 10 p.m. PT  |
|-----------------------|
| 10 a.m. – 6 p.m. PT   |
| 8:30 a.m. – 5 p.m. PT |
| 10 a.m. – 5 p.m. PT   |
|                       |

Online resources and services are available 24/7 at www.nu.edu/library

The Central Library is organized around student needs:

- Group and individual study spaces. Group study rooms should be reserved in advance.
- Information Commons—computers dedicated to student research and preparation of class work. Students may borrow laptops for in-library use. Wireless access is available. Printing is free from Library workstations.
- Curriculum Resource Center (CRC) —designed for education students, this state-of-the-art classroom is supported with K-12 educational curriculum, textbooks, multimedia materials, and software resources used in California schools
- Multimedia Lab— for learning how to successfully use current, multimedia software packages
- Print Collections Journals: current titles and microfiche back-files Books: Reference, circulating collection, juvenile and young adult books, curriculum materials, and special collections

### **Online Resources**

The Central Library is also the administrative center for the Library's Web-based services and online information. All of the online resources are accessible 24 hours a day, 7 days a week through the Library's home page: www.nu.edu/library. From a non-National University computer, authentication is required: Login: your National University 9-digit ID number Password: your 6-digit birth date (mmddyy)

- e-Reference resources provide access to the online version of many standard reference encyclopedias and handbooks
- e-Books represent over one-third of the Library's book collection and are selected to support academic research. E-books are listed in the Library's online catalog
- The e-Journal collection provides full text of many articles indexed by the databases to which NULS subscribes. Journal title records in the Library catalog indicate which databases provide the full text.

### **Online Services**

- Online tutorials and Library guides
- Online reference help: Ask A Librarian Phone: (858) 541-7900 or 1-866-NU ACCESS (682-2237) "Library" E-mail: refdesk@nu.edu
- Books Direct—ships books to regional and online students. A request form is available online—FREE
- Journal Direct—provides electronic access to print articles in the Library's collection. A request form is available online—FREE
- Interlibrary Loan—provides access to articles and books owned by other libraries. A request form is available online—FREE

### Writing Across the Curriculum

Writing Across the Curriculum is a University-wide program designed to enhance the development of writing and critical thinking skills in students throughout their studies at National University.

Strong writing skills are in demand in nearly every profession and the attainment of such skills gives students a competitive edge in job searches and career advancement. The University is dedicated to providing students and faculty with a full range of conceptual material, instructional resources and support systems. The goals of the Writing Across the Curriculum program are:

- To make writing and the complementary skills of reading, critical thinking, and research a regular part of coursework at National University
- To facilitate the acquisition of writing and communication skills that are vital to personal and professional success
- To distinguish graduates of National University in the eyes of employers and the general public through their professional and technical excellence in language and communication skills

Writing Across the Curriculum promotes writing and reading enhancement throughout all schools of study through a variety of publications and activities, including:

- Writing intensive courses
- Workshops for faculty
- Writing centers
- Professional forums for self-expression, such as The Gnu, a student literary journal, and WHACK, a faculty newsletter

Upon registration, students are asked to purchase *The Little Brown Essential Handbook for Writers* (Longman, Publisher). This book serves as the official National University writing guide and reference text, and it is used by instructors from all disciplines as a reference for their students.

### Writing Centers

National University students have the opportunity to work one-onone with writing instructors to develop their writing and critical thinking skills via synchronous appointments with the Online Writing Centers. An integral part of the Writing Across the Curriculum Program, the writing centers welcome the opportunity to help students at all levels to improve—from outlining a first year composition essay, to drafting a graduate level research paper. Writing centers are open during convenient hours throughout the week. The writing center staff, comprised of experienced writing instructors and well-trained graduate students, will not edit student work, but they are eager to read students' drafts and to offer strategies for improving their writing. For more information about writing center services and how to make an appointment, go to http://www.nu.edu/Academics/StudentServices/ WritingCenter.html

### Bookstore

The University contracts with an external vendor for the sale and buyback of textbooks. Textbooks are available for purchase two weeks prior to the first night of class. The cost of books varies with each course. Students must purchase all books and supplies necessary for the course in which they are enrolled. Textbooks may be purchased online, by phone, or by fax. Online access to the vendor is provided through the student portal on the University's website.

### English Language Programs

English Language Programs (ELP) offer English language instruction and a variety of cultural experiences to international students, visitors, and professionals. Programs include: University Preparation, an intensive course designed to prepare students for the academic environment; and English Communication, a course designed to meet the personal or professional needs of individuals. TOEFL is waived for ELP students who complete National University's academic programs.

English Language Programs also offer customized programs for executives and professionals, business English communication courses, Vocational English as a Second Language (VESL), Accent Reduction, Business English, and language assessment services, including the test of English for international communication (TOEIC).

### Transfer of Credits to Other Institutions

Each institution has policies that govern the acceptance of credit from other institutions. Accreditation by one of six regionally accrediting associations is the normal and primary criterion for making such determinations. National University is accredited by the Western Association of Schools and Colleges (WASC). Generally, credits and degrees from National University have been accepted by transfer institutions. Students who are anticipating a transfer, or advanced studies, are encouraged to contact such institutions directly to determine how National University credits will relate to the requirements of those institutions.

### **Student Support Services**

National University provides a number of services to help students attain their educational goals. In addition to the Office of Academic Affairs, several offices of the University join together to provide services for the academic, economic, and personal needs of enrolled students. Student services include student advising and scheduling, records evaluation, veterans assistance, financial aid, and other services. Additionally, the library, alumni association, extended learning office, and student accounts office are available to help students.

### Internet Student Access

All National University students can access the Internet from any of the computers found in the University's computer equipped classrooms and open computer labs.

National's programs and courses make frequent use of Internet resources, allowing students to learn the skills required to gain information through such electronic media.

#### Computer-Based Information Systems Research and Development Center

National University offers students online, real-time access to pertinent information. Through the student web portal, accessible from the University's home page, students can access appropriate parts of their records, class schedules, Degree Progress Report, and textbook requirements, as well as add and drop courses from their schedules.

### **Student Concierge Services**

National University's Student Concierge Services is students' onestop center for student service. Student Services Advocates are trained in a range of areas such as Financial Aid, Credentials, Admissions, and Graduations. Student Concierge Services is dedicated to providing innovative and individualized solutions for students. Student Concierge Services recognizes that National University students may not be available to contact us during normal business hours. That is why Student Concierge Services is available Monday through Friday from 7 a.m. to midnight at (866) 628-8988 or scs@nu.edu.

### **Students with Disabilities**

National University complies with the Americans with Disabilities Act of 1990 and Section 504 of the Federal Rehabilitation Act of 1973. Accordingly, qualified persons with disabilities may not, on the basis of that disability, be denied admission or subjected to discrimination in admission decisions. Further, no qualified student with a disability, on the basis of that disability, may be excluded from any academic, research, counseling, financial aid, or other post-secondary education program or activity that the University provides to all students.

Students seeking special accommodations due to a disability must submit an application with supporting documentation to the Office of Scholarships and Special Services. The Committee for Students with Disabilities, which meets monthly, will consider all materials and will afford qualifying individuals with appropriate accommodation. If a student is denied accommodation or believes that the accommodation afforded is insufficient, the student may appeal to the Vice President for Student Services, who will render a decision within seven (7) days of receipt of the appeal or prior to the start date of the next course, depending on which occurs first. The decision of the vice president is final.

Students or prospective students who want to read the complete National University Policy and Procedures, Services to Students with Disabilities, should request a copy from an advisor. Applications for accommodations for a disability may be sent to:

The Office of Scholarships and Special Services National University 11255 North Torrey Pines Road

La Jolla, CA 92037-1011 Phone: (858) 642-8185

#### The California Relay Operator can be reached at 711. **The Student Relations Coordinator (SRC)**

The Office of Student Affairs serves the National University community by advocating for accepted norms of fairness, decency and ethical behavior, adherence to the letter and spirit of National University policies, and prevention of delay, complication, and unresponsiveness in the application of University rules and processes. The Student Relations Coordinator works to fulfill the mission of the University by serving as an informal and impartial resource for the National University community and by acting in the following ways:

- Serving as an advisor who listens and identifies options to address the student's problem;
- Encouraging and assisting people to resolve their own conflicts. When requested, the SRC will intervene and work with all parties to resolve a dispute;
- Identifying personnel appropriate to handle a given problem, explain National University policies, connect people with University resources, and explain how the University system works;
- Assisting when normal channels have failed to resolve students' problems or when there is not a well-defined channel to address the concern;
- Providing a confidential way to raise sensitive or very private concerns; and
- Providing feedback to the President, Board of Trustees, deans, and other University officers about policies, practices, and structures that regularly produce conflicts, problems, and complaints.

In deciding whether to initiate contact with the SRC, it is best to view this step as a last resort to be taken only when other approaches have failed. For many problems, a normal procedure or route of appeal can be found in the General Catalog. Academic advisors, student concierge services, department chairpersons, deans, and directors are all, by virtue of their office, experts at handling specific types of problems and should normally be consulted first. The SRC does not take sides, but considers the rights and interests of all parties to a dispute with the aim of achieving a fair outcome. The SRC does not make, change, or set aside policies or decisions, but advocates for fairness. The SRC will not identify students or reveal their confidences without permission except when required by law. Information provided by the student to the SRC may not be used in grievance or other formal proceedings. For help identifying alternative courses of action please contact the Student Relations Coordinator:

Student Relations Coordinator National University 11255 North Torrey Pines Road La Jolla, CA 92037-1011 Phone: (858) 642-8035 src@nu.edu

### **Career Center**

The Career Center of National University is committed to providing professional career and employment related services to National University's current students and alumni. Regardless of the geographical location of students, the Career Center provides online assistance in the following areas: resume review and critique; job search assistance; interviewing and negotiating techniques; career management assistance, and counseling for those seeking additional support. The Center also hosts an online portal that enables students and alumni to search for jobs and post résumés. The portal contains an assortment of career-related resources as well.

For more information about the Career Center and its services, please call 858-541-7950 or 1-866-NU-ACCESS, ext. 7950 or e-mail: careerservices@nu.edu.

### **Testing Services**

Testing services include ACCUPLACER Testing, CLEP, and Credit by Exam/Challenge Exam.

For more information about National University's testing services, please call (858) 541-7951 or 1-866-NU-ACCESS, ext. 7951 or via e-mail: testingservices@nu.edu.

## Advancement and Alumni Relations

### National University Alumni Relations

The Office of Advancement and Alumni Relations is dedicated to providing alumni with lifelong learning opportunities for personal and professional growth. It also offers alumni opportunities for continued participation in the University community. Finally, it seeks to celebrate and promote the successes of our graduates.

National University alumni are eligible to participate in a broad array of programs and services through the office of advancement and alumni relations. The University maintains open communication with its alumni community through its website, email, mail, and an alumni e-newsletter titled the Newswire, which is circulated regularly to alumni with e-mail addresses on file. To subscribe, contact 1 (866) 682-2237, ext. 8111 or visit www.nu.edu/alumni.html.

The alumni relations website provides up-to-date information on initiatives such as networking events and career development workshops. Alumni may also access the Online Community, a network created exclusively for National University alumni, from the alumni website or at www.alumni.nu.edu. The Community features an alumni directory, job postings, class notes, and more. Alumni are also encouraged to visit the online National University merchandise store, where they can purchase University apparel and show their pride as alumni.

Alumni membership to the online library allows access to the netLibrary and Ebsco databases. For a one-year membership, please visit the alumni website at www.nu.edu/alumni.html.

### Development

As a nonprofit institution, the University relies to a large extent on contributions and partnerships to provide nontraditional learners with an affordable, accessible, and relevant education. The development office is responsible for securing annual gifts, corporate and foundation relations, planned giving, and major donor relations.

Charitable gifts help to fund scholarships and endowments that make a college degree affordable to underserved students. Partnerships with corporations and foundations launch new programs that are relevant and leading-edge. The development office fosters interaction with the University among corporations and other organizations to serve mutually beneficial community

needs. For further information, contact the vice president of advancement and alumni relations at 858-642-8131 or e-mail development@nu.edu.

### **International Students Support Services**

#### Admission

Applicants who require a Certificate of Eligibility for Nonimmigrant (F-1) Student Status, should contact an international admissions advisor for information on special admission requirements. A non-refundable application fee of \$65 is required for all international students. Prospective international students must establish means of financial support, provide official transcripts of previous education in order to establish academic eligibility, and fulfill an English Language Proficiency requirement.

Note: The University is required to maintain student records and to furnish the information to appropriate U.S. federal agencies upon request.

### **Transcript Evaluation**

Official documents (e.g. transcripts, mark sheets, diplomas) are required for admission. Transcripts from international institutions of higher education may require a credit recommendation by a recognized evaluation service selected by National University. Applicants are responsible for any required evaluation fees. The final decision on awarding credit is made by National University, which carefully considers the evaluation service's recommendations. Further information is available from the Office of the Registrar in San Diego.

### Language Proficiency

The English Language Proficiency requirement can be fulfilled with one of the following:

- 1) Providing proof of a bachelor's or a master's degree from a U.S., regionally accredited college or university.
- 2) Test of English as a Foreign Language.
- Students can establish English Language Proficiency by a Test of English as a Foreign Language (TOEFL) taken within 24 months before beginning coursework. Acceptable TOEFL scores are 525/197 for undergraduates and 550/213 for graduate students.
- International English Language Testing System (IELTS) may be used in lieu of TOEFL. Undergraduates must score 5.5 and graduates must score 6.
- A Certificate of Advanced English (C.A.E.) or Certificate of Proficiency in English (C.P.E.) grade of "C" or better will also be accepted.
- Completing a English Language Program (ELP) through a language school approved by National University. The International Student Advisor can assist with required levels of proficiency through an approved language school
- 3) Completing National University's English Language Program in San Diego (TOEFL is not required for students who have completed National University English language program).
- International students who need English Proficiency are tested and placed in the appropriate class level
- English Language classes follow the University calendar and provide 100 hours of instruction per month
- At the end of each month, the students are evaluated for advancement

Interested students should apply directly to:

English Language Program National University 9388 Lightwave Avenue Suite 185C San Diego, CA 92123

- ELP also offers programs for students who want to study the English language but do not plan to attend National University.
- 4) Students can also meet the English Language Proficiency requirements by satisfactorily completing the highest level of study at the following five language training institutions:
- English Language Systems (ELS) in locations throughout the United States and abroad (in California, ELS centers are in San Diego, Orange County, Santa Monica, San Francisco. and Oakland). Students must complete level 109 for undergraduate studies and level 112 for graduate studies.
- San Diego State University's American Language Institute (ALI) – level 106 or pre-MBA program.
- San Jose State University's Studies in American Language advanced level
- University of California at Davis's International Training and Education Center advanced level
- Fresno International English Institute

For additional information regarding the English Language requirements, students should contact an English Language Programs Coordinator at (858) 541-7968 or an international student advisor at (858) 541-7960 or 1-866-NU-ACCESS, ext. 7960 or e-mail: ipo@nu.edu.

### **Orientation for International Students**

Orientation is done prior to class start as a group and on an individual basis. The student will meet with an advisor prior to his/her first class. The orientation session will cover National University's intensive one-month format, academic policies and procedures, and library and research facilities. Immigration regulations, auto and health insurance, banking, and other topics of interest are also covered. The International student handbook is also available on National University's website http://www.nu.edu/international.

## Financial Aid



The University of Values

## Financial Aid

## **Student Financial Aid**

There are many types of financial aid available to assist students who qualify. For specific information regarding financial aid programs and the University's Financial Aid policies and procedures, please visit the Financial Aid website at www.nu.edu or visit a financial aid advisor on-campus.

### How to Apply for Financial Aid

Planning ahead and applying for financial aid can help students obtain an education, which might otherwise be outside their financial reach.

To be considered for federal and state financial aid, students must complete the process of "need analysis." Need analysis is the method used to estimate the amount of money students and their families can reasonably contribute toward the cost of education. For the current school year, a student's awards will be determined using the previous year's income (taxed and untaxed) and current assets. Other factors that are considered include the student's marital status and the number of dependents.

The data to complete a "need analysis" is collected when a student completes the Free Application for Federal Student Aid (FAFSA). Information on completing the FAFSA is available in the Financial Aid Guide, available from a financial aid or admissions advisor at all campuses or online at **www.nu.edu**. The Financial Aid Guide explains how to submit a FAFSA, which students must complete, sign, and mail to the federal processor for evaluation. To expedite the application process, students are encouraged to apply online at **www.fafsa.ed.gov**. National University computer labs are available for students' use.

Important Note: Students must mail in their signed certification page within fourteen (14) days when filing online in order for the FAFSA to be completely processed and eligibility determined by the U.S. Department of Education. If a student (and parent, if required) have a personal identification number (PIN), the application can be signed electronically. Sign up for a PIN at: www.pin.ed.gov

### **Student Eligibility Requirements**

To receive financial aid, students must meet all of the federal eligibility requirements. Students must:

- have a high school diploma or a General Education Development (GED) certificate
- be a U.S. citizen or an eligible non-citizen
- be enrolled in an eligible program and have their records evaluated by the Office of the Registrar (excludes non-degree studies and continuing education programs, which do not qualify for federal or state aid)
- demonstrate financial need as determined by the federal methodology (excludes the federal unsubsidized Stafford Loan Program and Grad PLUS Program)
- have a valid social security number
- maintain satisfactory academic progress, as defined by the university Financial Aid Office
- sign a Statement of Educational Purpose/Certification Statement
- not owe an overpayment on any Title IV educational grant or be in default on a Title IV educational loan unless satisfactory payment arrangements are made to repay or otherwise resolve the overpayment or default
- register with the Selective Service, if required to do so
- complete the verification process, if selected to do so, by submitting a copy of federal tax forms and any other required documents

suspended or terminated by a court as part of a conviction for possessing or selling drugs.

### **Dependency Status**

Students who apply for financial aid must determine whether they qualify as independent (self-supporting) students or as dependent students. Determination of a student's dependency status is made in the student status section on the Free Application for Federal Student Aid (FAFSA).

Students who meet at least one of the following criteria are considered independent:

- Students who were at least twenty-four (24) years of age prior to January 1st of the current year
- Students who are married
- Students who are enrolled in a graduate program (this does not include students who are enrolled in a credential program)
- Students who have legal dependents other than a spouse
- Students who are orphans or wards of the court (or were wards of the court until they reached age eighteen [18])
- Students who are veterans of the U.S. Armed Forces
- Students who are currently serving on active duty in the U.S Armed Forces for purposes other than training

Students who claim to be independent may be asked to provide documentation to verify their dependency status prior to receiving financial aid. Students who want to be considered independent due to circumstances other than those listed should contact a financial aid advisor prior to completing the FAFSA.

### Financial Aid Satisfactory Academic Progress (SAP) Policy

In accordance with federal and state student aid regulations, a student must maintain satisfactory academic progress to qualify for financial aid. There are three standards—one qualitative and two quantitative.

The Financial Aid qualitative standard measures cumulative Grade Point Average (GPA) and adheres to National University's Satisfactory Academic Progress policies, one for undergraduates and the other for graduates. For complete explanations, read the Satisfactory Academic Progress sections under Academic Information for Undergraduate Degrees and Academic Information for Graduate Degrees. The policy statements include the minimum cumulative GPA requirements and provisions for probationary periods, disqualification, and reinstatement. The Financial Aid Office abides by the University's decisions enforcing its policies.

The two Financial Aid quantitative standards measure progression toward the completion of a declared program of study. A maximum time frame is required, and it cannot exceed 150% of the program length for undergraduate programs. In addition, the Financial Aid Office has established the following requirements for minimum successful completion of credits at the end of an academic year defined as a period of 32 weeks of instructional time.

The units include coursework taken at National University and transfer credits. Progress will be reviewed when a student completes 32 weeks of instruction. If a student fails to meet the minimum credits required for an academic year, i.e., the 32 weeks of instruction and/or exceeds the maximum time frame for number of academic years of eligibility for pursing a program, the student is ineligible for aid.

To appeal the disqualification a student must file a Request for Review – Satisfactory Academic Progress form available from any Financial Aid Office and online at National University's website.

Note: A student's eligibility for any of the federal aid programs may be

## **Financial Aid**

| Type of Degree/Program                                 |    | Each academic year of 32 weeks of instruction |    |     |     |     |  |
|--|----|---|----|-----|-----|-----|--|
| Associate Degree (90 units required for completion)    | 1  | 2   | 3  |     |     |     |  |
| Cumulative number of units successfully completed      | 25 | 55  | 90 |     |     |     |  |
| Bachelor's Degree (180 units required for completion)  | 1  | 2   | 3  | 4   | 5   | 6   |  |
| Cumulative number of units successfully completed      | 25 | 55  | 90 | 120 | 150 | 180 |  |
| Master's Degree/Credential Program (60 units required) | 1  | 2   | 3  | 4   |     |     |  |
| Cumulative number of units successfully completed      |    | 40  | 60 | 80  |     |     |  |

### **Student Loan Deferment**

Federal subsidized Stafford loan borrowers are eligible for a federal interest subsidy whereby the federal government, rather than the student, pays the interest on a student's outstanding loan during the time the student is in school. During an authorized deferment of repayment, unsubsidized Stafford borrowers are eligible for the same deferment as subsidized Stafford borrowers. However, a deferment for an unsubsidized Stafford borrower only applies to the principal loan amount.

Deferments for PLUS applicants vary. See the Financial Aid Guide for details.

#### **Loan Deferment Procedures**

Once a month, the University submits student enrollment data to the National Student Loan Clearinghouse, which reduces the number of deferment forms students need to complete. Students who receive a letter, statement, or a deferment form from a lender must complete and submit the form as instructed. To be eligible for loan deferment, students must be in attendance at least half-time and meet one of the following:

- 1. Have completed at least the first class in their enrollment OR
- 2. Be in attendance in the first class of their enrollment and the

ninth day of the session must have passed. \*Deferment forms cannot be processed until students have started their program of study. The University cannot accommodate students who request deferment forms prior to beginning their program.

Deferment forms are only certified for the official class dates of enrollment and are based on unit load per quarter, regardless of the length of the class. The University provides lenders with data on student status but does not grant or deny deferment. The Clearinghouse only reports enrollment status to the National Student Loan Data System (NSLDS) for Stafford/PLUS borrowers. This reporting does not apply to Perkins or NU-HELP borrowers, who should file paper deferment forms to notify the University of their loan status.

### **Financial Aid Refund Policy**

As part of the Higher Education Amendments of 1998, Congress passed new provisions regarding refund policies and procedures for students who have received federal student aid and are considered withdrawn from school. Based on National University policies, which are made in accordance with federal regulations, a student is considered "withdrawn" if not in attendance for 75 consecutive days.

The Federal Return of Title IV Funds (RTIV) policy was effective October 7, 2000, and governs all federal grant and loan programs, including Federal Pell Grant, SEOG, ACG, SMART, Perkins Loan, Stafford/Direct Loans (subsidized and unsubsidized,) and PLUS loans.

For more information, please read the Catalog section titled Policies and Procedures.

## Assumption Program of Loans for Education (APLE)

The APLE program is a competitive teacher incentive program designed to attract outstanding students into the teaching profession. For those selected, the APLE program assumes up to \$19,000 in outstanding educational loans. Students must be California residents and enrolled in a course of study or a teacher preparation program leading to an initial teaching credential or a specialist credential in special education or reading. To receive the full benefit of the program, selected APLE recipients must agree to teach for four consecutive years in a California public school in a subject matter shortage area (math, science, foreign language, or special education) or in schools that serve a high proportion of students from lowincome areas, low-performing schools, schools with a high percentage of emergency permit teachers, or rural schools. For those applicants selected, the program will assume up to \$2,000 in educational loan debt for the first year of eligible teaching service and up to \$3,000 for each of the second, third, and fourth years of eligible teaching service. The application period is from May through September. Interested students should talk to a financial aid advisor for current deadlines.

## **Scholarship Programs**

### **University Scholarships and Grants**

Each year, National University awards tuition scholarships or grants to students in the following categories: those who demonstrate exceptional scholastic achievement; those who are educationally and economically disadvantaged in underrepresented categories; those with disabilities and demonstrated financial need; and those who are single-parents with demonstrated financial need. All scholarships or grants are based on the eligibility rules that apply to the particular award. The University's goal is to attract and retain quality students by providing scholarships that are based upon merit and financial need.

The University may, at its discretion, target certain campuses and/or certain academic programs for the awarding of scholarships. This prioritization will then constitute the first criterion for selection. The secondary criterion will be those specified for each type of scholarship as described below.

National University's scholarships are considered "last money" tuition scholarships. These scholarships are designed to supplement, but not replace, federal and state financial aid, employer tuition assistance, and student income. Awards are credited directly to the recipient's financial accounts. The number of scholarships depends on the availability of allocated funds. As a nonprofit institution, the University tries to provide as many scholarship and grant opportunities as possible.

The scholarship application process is available online through the student portal. Students are responsible for reading and complying with the policies and procedures contained in this catalog prior to applying for a scholarship.

## Types of Awards

### **Collegiate Honor Award**

Tuition scholarships of up to \$2,000 are available to students who have demonstrated exceptional scholastic achievement and are in need of financial assistance. To be eligible for this award, applicants must have completed 54 semester units at a U.S. regionally accredited community college or four-year college with an undergraduate grade point average of at least 3.5 on a scale of 4.0. Awards will be credited to students' accounts in increments, up to the maximum of \$500 per course. The application form is available online through the student portal.

### Presidential Tuition Scholarship

Presidential Tuition Scholarships of up to \$2,500 are available each fiscal year to undergraduate transfer students in at least one of the following categories:

- educationally and economically disadvantaged persons who have been historically underrepresented at higher educational
- institutions (African Americans, Hispanics and Native Americans)
- single parents with demonstrated financial need
   paragene with a warified disability and financial need
- persons with a verified disability and financial need Applicants must also meet all of the eligibility criteria listed below. They must:
- have an annual income below \$18,000 for single applicants or \$25,000 for a family of two or more
- demonstrate a cumulative college grade point average of 2.30 on a 4.00 scale
- have at least 56 semester hours of credit from an accredited college or university
- apply for federal and state financial aid
- be an undergraduate student working toward a first bachelor's degree
- be a U.S. citizen or eligible non-citizen

Awards will be credited to students' accounts in increments, up to the maximum of the full cost of tuition per course. The application form is available online through the student portal.

### **Military Tuition Scholarship**

Military Tuition Scholarships of up to \$2,500 are available to military personnel, including active duty, reservists, national guardsmen/ women, their spouses, and their dependents. The scholarship is intended to benefit educationally and economically disadvantaged personnel and their family members who have demonstrated financial need. For active duty personnel to qualify, they must have exhausted the aggregate amount of their military tuition assistance. In order to determine financial need, an applicant must file a Free Application for Federal Student Aid (FAFSA), which can be done online at www.fafsa.ed.gov. The applicant must also submit a letter describing personal circumstances that make earning an education important. In making the awards, preference will be given to applicants seeking undergraduate degrees. Awards will be credited to a student's account in increments up to a maximum of \$500 per course toward tuition. The application is available online through the student self-service portal. The letter describing personal circumstances should be sent to:

The Office of Scholarships and Special Services National University 11355 North Torrey Pines Road, La Jolla, CA 92037-1011

### **Community Scholarship**

The purpose of the community scholarship is to recognize outstanding performance in the workplace, professional

organizations, and community colleges. The Community Scholarship

program for employers and organizations is designed to augment such recognition programs as employee of the quarter/year, etc. For community colleges, the scholarship is designed to recognize outstanding academic performance for undergraduate transfer students.

Employers, professional organizations, and community colleges interested in participating in the National University Community Scholarship program should contact the Coordinator of Scholarships and Special Services at (858) 642–8185 or via e-mail at scholarships@nu.edu. The request should include a brief description of the employer/organization's current recognition program selection procedures and the number of employees/members eligible to participate.

### Transfer to Triumph Scholarship

Students who are transferring from a California Community College may be eligible for the Transfer to Triumph program. To be eligible a student must meet the following requirements:

- Be in good academic standing at the time of application to National University
- Have completed at least 30 semester units at a California Community College or combination of California Community Colleges
- Their last semester of attendance was at a California Community College and is within 24 months of their application date to National University

If students believe that they qualify for this scholarship, they must initiate it through their admissions advisor who will make a preliminary eligibility determination. The admissions advisor will enter the preliminary eligibility into the system and the application fee will be waived by student accounts. Once the student's entire file is complete, the Registrar's Office will evaluate the student and determine official eligibility for the scholarship. Students will be sent an e-mail indicating whether they have been approved or denied for the scholarship based on official eligibility determination. If a student had an admissions fee waived based on a preliminary determination and they are found not eligible at the time of evaluation then the admissions fee will be charged. The student must notify the scholarship coordinator once they are within three courses of completion of their program. The scholarship coordinator will verify this information and issue the award. Tuition for the final two courses will be billed and waived, and the student will receive an adjusted accounting.

### **Need-Based Scholarship**

The National University Need-Based Scholarship assists new and existing graduate students in degree programs with the tuition cost for one course per fiscal year for students with exceptional need. This award applies only to courses governed by the University's standard tuition rate. Awards are made based on student need, as established by the Expected Family Contribution (EFC) number and as calculated by the U.S. Department of Education from the filing of a Free Application for Federal Student Aid (FAFSA). The award is available each fiscal year, students must re-apply. Funds are distributed as available.

Applicants must also meet all of the eligibility criteria listed below:

- Must be a graduate student in a degree program
- Existing graduate students must demonstrate a grade point average of 3.00 on a 4.00 scale. New students must demonstrate a grade point average of 3.00 on a 4.00 scale from their most previous recent institution.
- Must be in good standing with student accounts
- Must submit a FAFSA form
- Be a U.S. citizen or eligible non-citizen
- Has not received another previous need-based scholarship that Fiscal Year from National University

## Scholarship Rules and Policies

Rules and policies that govern National University funded awards are as follows:

- To be considered for an award, students must apply and begin attending courses within the first three months of admission. Award recipients have twelve (12) months from the date of notification of the award to use funds, after which, all unused funds will be revoked.
- Funds will not be applied toward non-degree or certificate courses.
- Funds will only be applied toward courses the student has not yet attended.
- Funds will be not applied to past due balances.
- Funds are credited to a student's account in maximum increments of \$500 per 4.5 unit course per month for the Collegiate Honor Award; \$500 per 4.5 unit course per month for the Military Tuition Scholarship; up to the full cost of tuition per month for the Presidential Tuition Scholarship (up to \$2500 total).
- Award funds will only be applied toward the tuition cost for academic coursework toward an intended degree objective.
- Awards are not transferable. Only one award can be received and used per degree objective, except for eligible Presidential Tuition applicants who may re-apply and may receive a new award each Fiscal Year while pursuing their first bachelor's degree.
- Awards are made to students for their intended degree objective at the time of application.
- Students who receive other educational assistance in excess of 90 percent of the cost of tuition for a course are not eligible to receive award funds for the course.
- Recipients must maintain good standing with the Student Accounts Office to ensure continuation of their award.
- This award may affect the amount of other financial aid for which a student may qualify, or the award may be reduced or nullified by other educational assistance and aid the student receives.
- Application of award funds toward a withdrawn course will be based on the charge incurred. If there is no charge, there will be no application of funds.
- Award funds must be used within twelve (12) months of the original award. Funds not used within twelve (12) months of the award are forfeited.

## **Externally Funded Scholarships**

There are many corporations, organizations, and foundations that provide scholarships to students seeking undergraduate and graduate degrees. For application procedures and scholarship criteria, students should consult reference books in National University's library or on the University's Financial Aid website.

## V.A. Educational Benefits

Many active duty military personnel, veterans, dependents of deceased or disabled veterans, and reservists are eligible for Department of Veterans Affairs' educational benefits. The programs administered by the Veterans Affairs office at National University are:

### Chapter 32, VEAP

For veterans who entered active duty between January 1, 1977 and June 30, 1985 and who contributed to the program while on active duty.

### Chapter 30, Montgomery G.I. Bill (Active Duty)

For veterans who entered active duty beginning July 1, 1985 and who participated in the 12-month pay reduction program while on active duty. Also includes Chapter 32 active duty persons with eligibility as of October 1, 1996 who elected to participate in the Montgomery G.I. Bill.

# Chapter 1606, Montgomery G.I. Bill (Selected Reserve Program)

For undergraduates and graduates who enlisted in the reserves and who have made a six-year commitment to the selected reserves.

### Chapter 1607 (Selected Reserve Program)

For undergraduate and graduate students of the reserves personnel who were recalled for active duty. Eligibility is determined by the Department of Defense.

### Chapter 35, Dependent's Benefits

For spouses or children of veterans who died on active duty, whose death was caused by a service-connected disability, or who are rated 100 percent permanently disabled according to the Department of Veterans Affairs

### Chapter 31, Vocational Rehabilitation

For veterans with a service-connected disability, or who are rated 10 percent or more disabled according to the Department of Veterans Affairs.

### Chapter 34, G.I. Bill

For veterans who are currently on active duty if they entered the armed forces before January 1, 1977, or after January 1, 1977, under a delayed entry program.

Students should be aware that the Veterans Administration pays educational benefits only for those courses that are part of an approved degree or certificate program and that have not been previously and successfully completed. Students are required to attend classes regularly and maintain satisfactory grades.

## **Military Tuition Assistance**

The Veterans Affairs' Tuition Assistance department is located at 9388 Lightwave Avenue, San Diego, CA 92123. The department provides counseling, guidance, and reimbursements to the University for students who are eligible for active duty tuition assistance if they are in the armed forces. Students may be eligible for tuition assistance up to 75 percent of the cost of their tuition. The amount of the benefit for active duty tuition assistance is determined by the military branch of service. The tuition assistance staff works with active students and ensures the contracts are monitored for accuracy and meet compliance issues. It is the student's responsibility to apply for tuition assistance through the Educational Services Officer on-base.

Students who want to apply for programs administered by the Department of Veterans Affairs can obtain information on how to apply for their benefits by calling or visiting the Veterans Affairs Office located at the Spectrum Business Park campus. Veterans who enroll at National University are encouraged to call or visit the veterans representative for instructions prior to signing up for benefits. The Veterans Affairs Office telephone number is (858) 541-7970.

## **Alternative Educational Funding**

# Reserve Officers' Training Program (ROTC) Army and Air Force

Students can enroll in the ROTC program while attending classes at National University. There is a continuing need for scientific, computer, engineering, medical, and management personnel as well as pilots and navigators in both the Army and Air Force.

ROTC offers scholarships on a competitive basis for students already enrolled in college. Scholarship programs vary slightly each year. Generally, scholarships exist at the two-, three-and one-half- and four-year college levels. Applicants for ROTC scholarships are

selected on the basis of the "whole-person" concept that includes both objective (e.g., grade point average) and subjective (e.g., interview evaluation) factors.

National University students can enroll in ROTC by contacting the local ROTC Recruiting Office. Veterans who complete their studies and are commissioned by age thirty-five (35) may also be eligible for the ROTC.

### **Corporate Tuition Assistance**

Many companies and government agencies award tuition reimbursement to employees. Students should check with their employer for information on how to apply for this employeedevelopment fringe benefit.

### Aid for Native Americans

Native American students who can prove membership in a federally recognized tribe may receive educational grants from the federal Bureau of Indian Affairs (BIA).

Applications for BIA grants for California tribes are available by writing the Bureau's Office of Indian Education, 2800 Cottage Way, Sacramento, CA 95825 or by calling (916) 978-4680.

### **California State Rehabilitation**

The Department of Rehabilitation is a state agency that helps men and women with disabilities enter or return to work. It also has programs that ensure the rights of people with disabilities. Persons with a disability who need help living more independently or who need training to get a job should contact the regional office of this state agency.

### Private Lenders

There are several privately funded education loan programs available to assist students who do not qualify or have limited eligibility for government or institutional financial aid. Additional private lenders can be found at **www.EdFund.org** 

### **Additional Information Sources**

California Student Aid Commission www.csac.ca.gov

U.S. Department of Education www.ed.gov/finaid.html

College is Possible www.collegeispossible.org

Scholarship Search and Financial Aid Calculator www.fastweb.com

The U.S. Department of Education has created the Student Financial Aid Ombudsman to work with student loan borrowers to informally resolve loan disputes and problems with the following federal loans:

- William D. Ford Federal Direct Stafford Loans: Subsidized and Unsubsidized Direct Stafford Loans, Direct PLUS Loans (for parents) and Direct Consolidation Loans
- Federal Family Education Loans: Subsidized and Unsubsidized Stafford Loans, FFEL PLUS Loans (for parents) and FFEL
- Consolidation Loans
- Guaranteed Student Loans, SLS Loans and Perkins Loans
- Ombudsman Customer Service Line (877) 557-2575 or at http://www.fsahelp.ed.gov/

|  | Financial Aid Calendar  |  |  |  |  |  |
|--|---|--|--|--|--|--|
| A ca                                     | A calendar of deadlines and critical dates for students applying for financial aid at the University. |  |  |  |  |  |
| 2007-2008                                | 2008-2009   |  |  |  |  |  |
| January 1, 2007                          | January 1, 2008   | • Apply for financial aid. Students must file a new Free Application for Federal Student Aid (FAFSA) annually.   |  |  |  |  |
| March 2, 2007                            | March 2, 2008   | <ul> <li>Deadline for new Cal Grant A and B applications.</li> <li>National University Financial Aid priority filing date for FSEOG and Federal Perkins Loans. <i>Note: The Financial Aid Office will continue to make awards after this date as long as funds remain.</i></li> </ul>  |  |  |  |  |
| April 2007                               | April 2008  | <ul> <li>National University begins processing student awards. Financial Aid Packets containing the IAFFA and other<br/>verification documents will be mailed to aid applicants.</li> </ul>  |  |  |  |  |
| June 2007                                | June 2008   | Announcements of Cal Grant A and B Awards.   |  |  |  |  |
| July 2007                                | July 2008   | • The funding period begins for the Federal Pell Grant and Campus-Based programs (FSEOG, Federal Perkins).   |  |  |  |  |
| October 2007                             | October 2008  | The funding period begins for the Cal Grant programs.  |  |  |  |  |
| June 30, 2008                            | June 30, 2009   | <ul> <li>Federal Pell Grant deadline.</li> <li>Last day to file the FAFSA.</li> <li>Note: The Federal Student Aid Center must receive the student's FAFSA by this date (June 30th). Applications postmarked June 30th and received by the processor after June 30th will not be accepted for processing.</li> </ul>  |  |  |  |  |
| June 30, 2008                            | June 30, 2009   | • National University Verification/Processing deadline. Students must submit all requested forms by this date in order to receive financial aid for the school year.   |  |  |  |  |
| Completion of Student's<br>Academic Year |   | • Applying for an additional loan (Stafford and/or PLUS): Because students apply for and are awarded aid during different times of the year, each student's academic year will vary. Generally, students are eligible to reapply after they successfully complete all courses in the previous loan period. In addition, 32 weeks of inclass instruction (8 months) must be completed. To submit a new loan application, students must have at least three months remaining in their academic year. |  |  |  |  |

### **Financial Aid Programs**

The following chart describes Federal, State and institutional financial aid programs that are available. Please pay attention to program requirements and applications deadlines.

| Grant  | Loan | Undergrad. | Grad <sub>uato</sub> | CRED . 1 | CERT-2 | Need-Based | Financial Aid Programs 2007-2008   | Application<br>Deadline                   | Date Funding<br>Begins  |
|--|------|------------|----------------------|----------|--------|------------|--|---|---|
| •  |      | •          |                      |          | •      | •          | <b>FEDERAL PELL GRANT</b> is a grant program to help students with tuition cost. This program assists students who are working towards a first bachelor's degree. <i>Award Range:</i> \$400 to \$4,310 <i>Applications:</i> FAFSA, IAFFA   | June 30, 2008                             | July 2007   |
| •  |      | •          |                      |          | •      | •          | <b>FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (FSEOG)</b> is a grant program to assist with tuition cost. Like Pell Grant, a student must be enrolled in a first bachelor's degree. Awards are made on a limited basis to students with an exceptional financial need.<br><i>Award:</i> \$3,000 maximum per year<br><i>Applications:</i> FAFSA, IAFFA  | Priority<br>filing date:<br>March 2, 2007 | July 2007   |
|  |      |            |                      |          |        |            | ACADEMIC COMPETITIVENESS GRANT (ACG) is a federally funded grant program<br>to assist with financial need. ACG applicants must be first- or second-year students<br>who have competed a rigorous secondary school program. Students must be U.S.<br>citizens, PELL grant recipients, and enrolled full time. Second-year recipients must<br>have achieved a minimum 3.0 GPA at the end of the first year.<br><i>Awards:</i> \$750 first academic year of student's program of study<br>\$1,300 second academic year of student's program of study<br><i>Applications:</i> FAFSA, IAFFA   | June 30, 2008                             | Based on<br>each<br>student's<br>individual<br>course<br>schedule |
|  |      |            |                      |          |        |            | National Science and Mathematics Access to Retain Talent Grant (SMART) is a<br>federally funded grant program to assist with financial need. SMART applicants<br>must be third- or fourth-year students in a four-year degree program, pursuing a<br>program of study in Computer Science, Engineering, Critical Foreign Languages,<br>Life Sciences, Mathematics, Physical Sciences, Technology, or Multidisciplinary<br>Studies. Students must be U.S. citizens, PELL grant recipients, and enrolled full<br>time, and maintain a minimum cumulative 3.0 GPA (no rigorous high school<br>program required.)<br><i>Awards:</i> \$4,000 per third and fourth academic year of student's undergraduate<br>program | June 30, 2008                             | Based on<br>each<br>student's<br>individual<br>course<br>schedule |
|  |      | •          |                      |          |        | •          | <b>CAL GRANT A</b> is a state funded grant program to help students with tuition cost.<br>Grant recipients are selected on the basis of financial need and grade point average.<br>Students must be California residents working towards a first bachelor's degree.<br>Recipients of this award will be notified by the California Student Aid Commission<br>in June.<br><i>Award:</i> \$3,236 per quarter<br><i>Applications:</i> FAFSA, GPA verification   | March 2, 2007                             | Oct. 2007   |
| •  |      | •          |                      |          |        | •          | <b>CAL GRANT B</b> is a state funded grant program to help students with tuition cost. This program is intended to assist students with high-potential from disadvantaged/low-income families. Students must be California residents who have completed less than one semester of undergraduate studies. Recipients of this award will be notified by the California Student Aid Commission in June. <i>Tuition Award:</i> \$3,236 per quarter <i>Access:</i> \$517 per quarter <i>Applications:</i> FAFSA, GPA verification   | March 2, 2007                             | Oct. 2007   |
| <b>1 Credential Program</b> Students must<br>complete the program residency<br>requirement at National (except for<br>recipients of NU Scholarships) and may<br>only apply for financial aid as a fifth year<br>undergraduate. <b>2 Certificate Program</b> These programs<br>must consist of 36 units in length (except<br>for recipients of NU Scholarships). Students<br>are not eligible to reapply for an additional<br>Stafford or PLUS Loan in the Certificate<br>Program. <b>KEY</b><br>FAFSA: Free Application for Federal<br>Student Aid<br>IAFFA: Institutional Application for<br>Financial Aid<br>GPA: Grade Point Average<br>Note: Award ranges and aid types are tentative. |      |            | tative.              |          |        |            |  |   |   |

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| Grant | Loan | Undergrad | Graduate | CRED - 1 | CERT-2 | Need-Based | Financial Aid Programs 2007-2008  | Application<br>Deadline  | Date Funding<br>Begins   |
|-------|------|-----------|----------|----------|--------|------------|---|--|--|
|       | •    | •         | •        | •        | •      | •          | <ul> <li>SUBSIDIZED FEDERAL STAFFORD STUDENT LOAN is a loan program to assist students with educational expenses. The interest rate for a new borrower is a variable interest rate capped at 8.25% and is adjusted July 1 of each year. The 2007-2008 rate is 6.8%. Stafford recipients are not required to make payments or pay the interest during full-time attendance or the first six months after the student's last date of attendance.</li> <li>Loan Amount: For each academic year, a dependent student may borrow: <ul> <li>up to \$3,500 as a first year undergraduate</li> <li>up to \$4,500 as a second year undergraduate</li> <li>up to \$5,500 for a credential</li> </ul> </li> <li>Dependent students may receive both an unsubsidized and subsidized Stafford up to the amounts listed above.</li> <li>Applications: FAFSA, IAFFA, Loan Application</li> </ul> | Three months<br>prior to the<br>student's last<br>course of the<br>academic year | Based on each<br>student's<br>individual<br>course<br>schedule |
|       | •    | •         |          |          |        |            | <text><text><text><text><text><list-item><list-item><list-item><list-item><list-item><list-item><text></text></list-item></list-item></list-item></list-item></list-item></list-item></text></text></text></text></text>  | Three months<br>prior to the<br>student's last<br>course of the<br>academic year | Based on each<br>student's<br>individual<br>course<br>schedule |

| Grant | Loan | Undergrad | Graduate | CRED_1 | CERT-2 | Need-Based | Financial Aid Programs 2007-2008   | Application<br>Deadline  | Date Funding<br>Begins  |               |
|-------|------|-----------|----------|--------|--------|------------|--|--|---|---------------|
|       | •    | •         |          | •      | •      |            | <b>FEDERAL PARENT LOANS FOR STUDENTS (PLUS)</b> is a loan program to assist parents of undergraduate dependent students with educational costs. This loan has a variable interest rate capped at 8.5%. Like the unsubsidized Stafford Loan, the interest is not subsidized by the government. Repayment begins 60 days after the loan is made; however, for parents who qualify, payments (principal only) can be deferred during full-time attendance, but interest will accrue.<br><i>Loan Amount:</i> For each academic year, a parent may borrow up to the student's cost  | Three months<br>prior to the<br>student's last<br>course of the<br>academic year | Based on<br>each<br>student's<br>individual<br>course<br>schedule   |               |
|       |      |           |          |        |        |            | of attendance minus other aid, per undergraduate dependent student.<br><i>Fees:</i> (same as the Stafford Loan Program)<br><i>Applications:</i> IAFFA, FAFSA, PLUS Loan Application  |  |   |               |
|       |      |           |          |        |        |            | FEDERAL PLUS LOANS FOR GRADUATE STUDENTS (GRAD PLUS) is a loan program to assist graduate students with educational costs. This loan requires the borrower to demonstrate credit-worthiness, has a fixed interest rate of 8.50%, and fees up to 4% may be charged. Like the unsubsidized Stafford loan, the interest is not subsidized by the government. Contact your lender for information regarding payment deferment, if applicable. Loan Amount: For each academic year, the student may borrow up to the cost of attendance minus other aid. Fees: (same as the PLUS Loan Program) Applications: IAFFA, FAFSA, Loan Application   | Three months<br>prior to the<br>student's last<br>course of the<br>academic year | Based on<br>each<br>student's<br>individual<br>course<br>schedule   |               |
|       | •    | •         | •        | •      | •      | •          | <ul> <li>FEDERAL PERKINS LOAN is a low-interest (5%) loan program. This program assists students with tuition cost and is funded on a limited basis to students with exceptional need. The major advantage for Perkins recipients is that the government pays the interest during at least half-time attendance and for nine months after the student's last date of attendance. In addition, students are not required to make payments during that time.</li> <li>Award Range: \$300 to \$3,600<br/>Cumulative Totals: <ul> <li>Up to \$20,000 for undergraduate study</li> <li>Up to \$40,000 for graduate or professional study<br/>Applications: IAFFA, FAFSA</li> </ul> </li> </ul>  | Priority<br>filing date<br>March 2, 2007   | July 2007   |               |
| •     |      | •         | •        | •      | •      |            | <ul> <li>NATIONAL UNIVERSITY SCHOLARSHIP PROGRAM consists of the Collegiate Honor<br/>Award, the NU Presidential Scholarship, and the Military Tuition Scholarship. These<br/>awards are designed to recognize students for outstanding leadership, superior job<br/>performance and exceptional scholastic achievement. The NU Presidential Tuition<br/>Scholarship is also designed to recruit and retain underrepresented educationally and<br/>economically disadvantaged students, single parents with financial need and<br/>handicapped students.</li> <li>Awards: <ul> <li>Collegiate Honor up to \$2,000</li> <li>Presidential Tuition Scholarship up to \$2,500</li> <li>Military Tuition Scholarship up to \$2,500</li> <li>Application: Scholarship Application</li> </ul> </li> </ul> | Open, but subject<br>to available funds  | Funding will<br>begin upon<br>receipt of the<br>signed<br>scholarship<br>acceptance<br>letter by the<br>Fin. Aid<br>Dept. | Financial Aid |
|       | •    | •         | •        | •      | •      |            | NATIONAL UNIVERSITY HIGHER EDUCATION LOAN PROGRAM (NU-HELP)<br>is a low-interest (6.75%) loan established by National University. This loan program is<br>designed to supplement other resources the student may receive. Applicants are selected<br>on the basis of financial need and credit history. Repayment begins six months after the<br>student's last date of attendance. The maximum repayment term is 10 years. Funds are<br>awarded to assist students with tuition cost, on a limited basis.<br><i>Award Range</i> : up to full tuition for 12 months<br><i>Cumulative total of tuition for fiscal year</i> :<br><i>Origination Fee</i> : \$30 will be charged to the student's account.<br><i>Applications:</i> FAFSA, IAFFA, NU-HELP Loan Application                              | Open, but subject<br>to available funds  | July 2007   |               |

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The University of Values

# **General Policies and Procedures**

### **Attendance Procedures**

All students must be officially enrolled in order to attend class and to receive a grade. This means that the course must be added to the student's schedule prior to the ninth (9th) day of the session. University instructors will not permit non-enrolled students to attend a class or be issued a grade. The Office of the Registrar will not post grades for students who are not enrolled.

Typically, the start-date of a session is the first Monday of the new course month or term. If the first Monday is a holiday, the start-date will be the first Tuesday. For example, if the first course offered in the October session meets on Mondays and Wednesdays, then that first Monday is the start-date for the session. The session start date (whether that is a Monday or Tuesday) stays the same regardless of the day students actually meet for their first class. Students are considered officially enrolled in a class at midnight of the ninth (9th) day of the session.

Students are expected to attend all class periods of a course. An instructor may withdraw a student from the course up to the twenty-first (21st) day of the session if the student has more than two (2) absences. An absence is assessed each time a student does not attend a regularly scheduled class, whether or not it is an excused absence. Students who have more than three (3) absences and who are still enrolled as of midnight of the twenty-first (21st) day of the session will be issued a letter grade of "F" or "U" as appropriate for the grading criteria of the class. Tardiness and early departures from classes accrue and have the potential to cumulatively affect absences.

Lack of participation for students taking online classes does not qualify the student for a refund. Students, whether onsite or online, are responsible for following the published policy on deadlines for drop and withdrawal.

With instructor approval, students may be allowed to make up examinations or class assignments missed due to absence or tardiness. Students must arrange to complete any make-up work with the instructor in advance. Work must be completed prior to the final class session. A grade of incomplete may be issued if the student has attended two-thirds of the course and coursework is not completed by the final class session. Instructors may use their discretion when issuing approval of, and assigning, an incomplete grade.

Any dispute about attendance must be addressed by the student in writing and submitted to the Registrar's Office within ninety (90) days of when grades were posted. If extenuating circumstances prevent the submission of the dispute within that time frame, the Registrar's Office will make a determination about whether the circumstances warrant further consideration. The Registrar's Office will not consider a dispute that is more than one year old.

Once grades have been issued and credit awarded, neither the coursework nor the grade can be expunged from the student's record. Tuition will not be refunded without extenuating circumstances and approval of the Finance Committee.

## **Refund Policy**

Students are accepted and enrolled in classes with the understanding they will attend the entire course. Faculty contracts, commitment of space, and other University resources are made on that assumption, creating financial obligations that students who withdraw must share. The University's refund policy reflects this position. Students may use the self-service function on the student web portal to drop themselves from class prior to midnight of the ninth (9th) day of the session. They may also ask an admissions advisor to drop their class for them. The student is responsible for ensuring that the drop or withdraw is reflected in their record appropriately by viewing their schedule on the student web portal.

To accurately count session days, note that the first day of a session — and not the actual day a student attends class — counts as day one. The University counts calendar days rather than business days for determining refunds. As such, if the first day of the session is a Monday, the student would need to drop prior to midnight of the following Tuesday, the ninth day of that session.

If a student does not complete a course, tuition refunds are made according to the schedule below. The refund policy is the same for onsite and online classes. Students who drop or withdraw from a course:

- prior to midnight of the ninth (9th) day of the session receive a 100 percent refund;
- prior to midnight of the tenth (10th) day of the session receive a 50 percent refund; and
- after midnight of the tenth (10th) day receive no refund.

To receive a refund, students must submit a written request to the nearest Student Accounts Office as the University does not disburse refunds automatically. Students must have a credit balance on their account to receive a refund. Most refunds are processed and mailed within ten (10) working days from the receipt of the request depending on the verification of funds. All refunds are mailed to the student's home address so students must make sure that the address on file is correct. Refund request forms are available at all Student Accounts Offices.

## **Financial Aid Refund Policy**

As part of the Higher Education Amendments of 1998, Congress passed new provisions regarding refund policies and procedures for students who have received Federal Student Assistance and are considered withdrawn from school. Based on National University policies, which are made in accordance with federal regulations, a student is considered "withdrawn" if not in attendance for 75 consecutive days. Given National University's model of one course per month, this would generally equate to a three-month break in attendance.

The Federal Return of Title IV Funds (RTIV) policy was effective October 7, 2000, and governs all federal grant and loan programs, including Federal Pell Grant, SEOG, ACG, SMART, Perkins Loan, Stafford/Direct Loans (subsidized and unsubsidized,) and PLUS loans.

This federal regulation assumes that awards of Federal Student Aid funds are earned in proportion to the number of days attended for the period funded. If a student is considered withdrawn from the University, a calculation is then performed to identify the total scheduled financial assistance the student earned and is therefore entitled to receive. If the student receives (or the University receives on the student's behalf) more financial aid than is earned , the unearned funds must be returned to the Department of Education and/or the appropriate lender. If the student receives (or the University receives on the student's behalf) less financial aid than the amount earned, the student may be able to receive those additional funds.

The portion of federal grants and loans that a student is entitled to receive is calculated on a percentage basis. The percentage is determined by comparing the total number of days in the specified payment period to the number of days completed before withdrawing from the University. For example, if a student completes 30 percent of the payment period, the student earns 30 percent of the financial aid he/she was originally scheduled to receive. This means that 70 percent of the scheduled award received at the beginning of the payment period becomes unearned and must be returned.

In general, loan disbursements and grants cover a specific period of time and number of units called the payment period. Once more than 60 percent of the payment period has been completed, all (100 percent) of the financial aid award received for that period is considered earned.

Important Note: If a student is considered withdrawn from the University (officially or unofficially) before completing 60 percent of a payment period, the student may have to repay unearned federal monies that were already disbursed at the beginning of the payment period. The withdrawal date will be determined as either:

- The effective date of withdrawal from the last course attempted, as documented by the University, or
- The last date of attendance at an academically related activity, as documented by the University.

If it is determined that the student received excess funds that must be returned, the University shares the responsibility of returning those funds. The University's portion of the funds to be returned is equal to the lesser of:

- The entire amount of the excess funds, or
- The total in tuition and fee charges multiplied by the percentage of unearned aid received.

If the refund calculation determines that the University is not required to return all of the excess funds, then the student must return the remaining amount. Any loan funds that a student is required to return must be repaid according to the terms of the promissory note. If any grant funds must be returned, the law allows the repayment amount to be reduced by 50 percent. This means that a student who has received too much in grant funds will only be required to return half of the excess amount.

If there is a return of any unearned financial aid by the University, the student will be billed accordingly. In such cases, the student will be required to make arrangements with the Student Accounts Office to pay the amount refunded to the Department of Education or the lender within 45 days of the date of the University's notification. In addition, the student will not be eligible for any further federal financial aid until the balance is paid to the Business Office.

### **Finance Committee**

Students who wish to dispute the interpretation of a University financial policy, or who seek special consideration regarding a financial matter, can appeal their case to the finance committee.

Requests must be submitted in writing through the Student Accounts Office and must contain all pertinent information to support the appeal. All financial disputes must be submitted within one year of occurrence. Each case is decided upon its own merits. The decision of the committee is final and not subject to appeal, unless there is information pertinent to the outcome which was not available at the time of the initial request.

## **Course Scheduling**

Any course substitutions or changes in a degree program must be consistent with a student's degree objective and fulfill the graduation requirements for the degree. Students should contact an admissions advisor for assistance in requesting such changes. For students

# Policies and Procedures

receiving financial aid, changes made to their schedules after processing may delay or cancel their aid. Students should speak to a financial aid advisor before withdrawing from a course or requesting a change of schedule or program.

Students can change the class in which they are enrolled prior to the start date of that course. To ensure that the desired course is available, students are encouraged to substitute or add a course at least one (1) week in advance of the start date.

Students may drop a course prior to midnight of the ninth (9th) day of the session. A grade will not be awarded and tuition will not be charged. After midnight of the ninth (9th) day of the session, a grade may be entered and tuition will be charged according to the refund policy.

### **Course Drop and Withdrawal**

The term "drop" means a student has dropped a course prior to midnight of the ninth (9th) day of the session, and no grade or notation appears on the student's record. The term "withdrawal" signifies that a student has withdrawn from a course after midnight of the ninth (9th) day of the session, and a "W" will appear on the student's record. Students who withdraw after midnight of the twenty-first (21st) day of the session will receive a grade of "F" or "U," as appropriate for the course. This is a permanent mark with no grade points assigned. Notifying the instructor of one's intent to withdraw is insufficient and will not constitute an official withdrawal. Students may drop themselves from a course using the student web portal prior to midnight of the ninth (9th) day of the session or they may ask an admissions advisor to drop the course for them. The student is responsible for ensuring that the drop or withdraw is reflected in their record appropriately by viewing their schedule on the student web portal.

### **Grade Reporting**

All grades are reported electronically. Students can access their official grades as posted to their record via the student web portal on the University's website. Students who need an official printed copy of a grade report can request one through the website. The report is generated automatically and mailed out on a weekly basis. Grades are not given over the telephone, via e-mail, or by visiting the Office of the Registrar. Although it is requested that instructors submit grades within ten (10) working days, due to the varying requirements of each course, instructors are allowed a reasonable time frame. Grades are only reported for students who are officially enrolled in a class. Students should direct questions regarding the accuracy of a grade to their instructor.

### **Student Records**

Transcripts and other documents received by the University for the purpose of admission or recording supplemental work become the property of the University and will not be released to or copied for students. Even though California regulatory agencies require that student records be kept for only five (5) years, National University's student records are retained indefinitely.

### **Request for Issuance of Transcripts**

Students should direct requests for the issuance of National University transcripts to the National Student Clearinghouse at www.nslc.org or they may access the NSLC website through the student web portal. Students must specify if they are requesting a standard academic transcript or a continuing education /extended learning transcript. The transcript fee is \$5.

The Registrar issues transcripts and other official documents only after students have settled all financial obligations to the University. All records and services are withheld from students who have any outstanding financial obligations to the University or who have defaulted on a federal Perkins or NU-Help loan. Transcripts contain only coursework completed at National University. A summary of previous education is entered into the official transcript of record.

## Full-Time Student Status

Undergraduate students or post-baccalaureate students pursuing a credential must meet one of the following requirements to obtain "Full-Time Student Status":

- 13.5 units in any three-consecutive-month period (or a quarter)
- 18 units in any six-consecutive-month period, providing there is no three-consecutive-month break in attendance during the six (6) months

Graduate students must meet one of the following requirements to obtain "Full-Time Student Status":

- 9 units in any three-consecutive-month period (or a quarter)
- 13.5 units in any six-consecutive-month period, providing there is no three-consecutive-month break in attendance during the six (6) months

The units for any class with a "Withdrawn" status do not count toward determining full or part-time status. Students who do not attend for a quarter (a three-consecutive-month period) are considered to be "Withdrawn" for that time period. Students with proper identification can verify enrollment at the reception area of the Office of the Registrar, 858-642-8260. Verification can also be requested through the mail with an authorized student signature. *Note: Off-campus agencies may use different definitions for determining full-time status. For example, the above definition of "Full-Time Student Status" may not apply to international students who require an F-1 visa.* 

## **Cancellation of Classes or Programs**

The University reserves the right to cancel or postpone a class or a program if student enrollment is insufficient. However, every effort will be made to cancel the class or program well in advance of the intended start date allowing students to reschedule or make other arrangements.

## **Bar from Attendance**

Students may be barred from attending classes for failure to:

- Present official transcripts certifying degree/status from previous institutions
- Comply with admission requirements
- Respond to official University notices
- Settle financial obligations when due

Students who are barred from attendance are generally given advance notice. If a student fails to respond or has a history of failing to respond, action will be taken without further notice and the student will no longer be entitled to services of the University, except for assistance toward reinstatement. The University can drop the student from all current and future classes if appropriate. Under no circumstances may a student who has been barred from attendance attend class or receive a grade.

## Withdrawal from the University

Students who wish to withdraw permanently from National University must fill out a "University Withdrawal Form," which is 42 available at each campus or online at the University's website. They will be immediately withdrawn from the University and their future classes will be deleted from their schedules. Federal student aid recipients should refer to the "Financial Aid Refund Policy" in this catalog.

### **Non-Degree Students**

A limited number of applicants are allowed to be admitted as nondegree students. Non-degree student applicants must follow the usual admission procedures, establish academic qualifications to enter the courses desired, and remit the customary tuition and fees. Admission as a non-degree student neither implies nor ensures acceptance as a degree candidate. Non-degree students are permitted to enroll in no more than six (6) courses or 27 quarter units. Students requesting an exception must submit a request via the e-form on the student web portal to the Committee on the Application of Standards.

Applicants for an Undergraduate Non-Degree program must provide at least a high school transcript or G.E.D. scores and applicants for a Graduate Non-Degree program must provide proof of a bachelor's degree from a regionally accredited institution.

## Air Force ROTC

National University does not have an AFROTC program. Students may, however, enroll in AFROTC courses at another institution in conjunction with completing their degree programs at National University.

AFROTC courses are conducted on the campus of San Diego State University. Further information on these programs may be obtained from the AFROTC advisor at the Aerospace Studies Department, (619) 594-5545, 5500 Campanile Drive ENS 385 San Diego, CA 92182-7238. http://www-rohan.sdsu.edu/dept/afrotc/HTML/index.html

## **Auditing Courses**

To audit a course, a person who is not a current student must complete an admission application with an admissions advisor. Approval to audit is given on a space-available basis. Students auditing a course must pay the regular fees and tuition and participate in class activities, but are not required to take examinations. No course credit is awarded to the student.

### Visitors

No one may visit a classroom during class hours without the prior approval of the instructor and the Director of Student Services at the site. Students may not bring children to the classroom or computer lab or leave them at any other University facility while attending class. Violations may result in disciplinary action.

## **Smoking Policy**

The University prohibits smoking in all National University facilities, vehicles, and outside stairways. In addition, the University prohibits the sale of all tobacco products and tobacco advertising at University facilities and in University publications.

Tobacco smoke is known in the state of California to cause cancer; it poses a significant risk to the smoker. Second-hand smoke can be harmful and annoying to non-smokers.

Individuals who smoke outside a University facility should smoke a minimum of twenty-five (25) feet away from the building and must properly dispose of smoking materials in appropriate designated receptacles.

### **Animals on Campus**

Animals, other than trained service animals for persons with disabilities, are not permitted in a University facility. Violations may result in disciplinary action.

## Library Borrowing Privileges and Fines

All current National University students, faculty, and staff are eligible to borrow Library materials. The National University Library borrowing privilege is subject to verification of current university enrollment or employment, and is valid for one year. Borrowing privileges for National University staff members will be renewed when the staff member checks out books at the end of the year. Books and CD-ROMs circulate for four weeks. A maximum of 10 books and CDs may be checked out at one time. Periodicals, microforms, reference books, reserve books, and Special Collection items do not circulate, but may be photocopied.

The late fee for overdue books and CDs is \$0.20 per day, per item with a \$10.00 maximum late fee. Once the fine reaches \$5.00, students may not check out more books until the fine is paid. Materials not returned to the Library are considered lost. For lost items, the borrower is responsible for \$30.00 replacement cost plus the \$10.00 maximum late fee. If the material is returned, only the \$30.00 replacement fee is refundable. The late fee for overdue PED reserve test kits is \$3.00 per day, per item, with no limit. The late fee for overdue EXC reserve test kits is \$0.20 per hour, per item. Test material not returned to the Library is considered lost. The replacement cost for reserve materials, PED test kits, and EXC test kits is the current replacement value of the lost item.

### Library Video Booking

All media booking requests from faculty members must be placed three working days prior to the date needed. The video booking form is located on the Library web page under Faculty Resources, or in the Library's online catalog. Faculty members cannot pick up videos at the Central Library and take them to another location. Students may view audio-visual materials in the Central Library with advance notice by calling the Library Help Desk at (858) 541-7900.

## **Computer Lab Regulations**

Computer labs are available at many University locations for use by students, faculty, and staff. Lab assistants are available at each location to ensure availability and operability of computing resources and to ensure that the resources are used appropriately. By using any National University Computer Lab, students agree to comply with the computer and Internet access policy, and additionally agree to follow the following regulations:

- 1) Students must sign in to use the computer lab facilities. They may be asked to show University identification.
- Students may not install software on University computers. Software copyrights are strictly enforced. The Computer Software Policy provides complete details.
- 3) Students may not bring food or drink into the labs.
- Computing resources in the lab are for University-related use purposes only.
- 5) Students should minimize their use of lab printers. They must use copy machines when multiple copies of documents are required. The lab assistant has the right and responsibility to limit computer printing based on local requirements and his/her judgment.
- 6) The computers are equipped with headphones for student's use for multimedia content. Students are asked to adjust the volume on the headsets to a level that will not disturb others.

The lab assistant has the right to ask students to leave for noncompliance with any University regulations. Technical questions, equipment failure or malfunction, and disputes should be report to the Help Desk line at 619-563-2647 for resolution.

Lab hours are posted at each facility and are subject to change to support class scheduling requirements and holidays. It is the lab user's responsibility to become familiar with the schedule. The computer labs close promptly at the scheduled closing times.

### Ethical Usage

Computing resources must be used in accordance with the high ethical standards of the University community and local, state, and federal laws. Examples of unethical and possible illegal use follow:

- Violations of computing system security
- Unauthorized use of computer accounts, access codes, or computer identification accounts assigned to others
- Intentional use of computer telecommunication facilities in ways that unnecessarily impede the computing activities of others (such as randomly initiating interactive electronic communications or email exchanges, or overuse of interactive network utilities)
- Use of computing facilities for private business purposes unrelated to the purposes or to the mission of the college or college life
- Academic dishonesty (plagiarism, cheating)
- Violation of software license agreements
- Violation of network usage policies and regulations
- Violation of another user's privacy

### Illegal Usage

Computer resources may not be used for illegal purposes. Examples of illegal purposes include but are not limited to:

- Intentional harassment of other users
- Intentional destruction of or damage to equipment, software, or data belonging to the University or other users
- Intentional disruption of unauthorized monitoring of electronic communications
- Unauthorized copying of copyrighted material- The copying of copyrighted materials, such as third-party software, without the express written permission of the owner or the proper license, is prohibited.

### **Network Security Terms of Use Policies**

In order to promote ethical and facilitative computing, National University's network users are prohibited from any of the following:

- Use of systems and/or networks in attempts to gain unauthorized access to remote systems
- Use of systems and/or networks to connect to other systems, in evasion of the physical limitations of the remote system/local,
- Decryption of system or user passwords
- The copying of system files
- Intentional attempts to "crash" network systems or programs
- Any attempts to secure a higher level of privilege on network systems
- Running of HTTP, E-mail, and FTP servers is strictly prohibited on student machines
- The willful introduction of computer "viruses" or other disruptive/destructive programs into the organization network or into external networks

Failure to adhere to these prohibitions may subject the student to punishable disciplinary action.

### **Computer Software and E-mail Policies**

The Copyright Law of the United States (Title 17, United States Code) governs the making of copies of copyrighted software. Copyright infringement could subject the violator to civil damages and criminal penalties, including a fine or imprisonment. University policy further prohibits any use or copying not authorized by the purchase agreement or license under which the university acquired the software. A copy of such agreement is available for inspection at the office of the Vice President, Information Technology. Students may not use the e-mail addresses of other students, faculty, or staff for purposes unrelated to the University. Violations may lead to disciplinary action.

# Family Educational Rights and Privacy Act of 1974 (FERPA)

National University maintains all student records in accordance with the provisions of FERPA as amended. FERPA affords students certain rights with respect to their education records. They are:

- The right to inspect and review the student's education records within forty-five (45) days of the day the University receives a request for access. Students should submit to the registrar, dean, head of the academic department, or other appropriate official, written requests that identify the record(s) they wish to inspect. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the University official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
- The right to request an amendment of the student's education records that the student believes is inaccurate or misleading. They should write the University official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the University decides not to amend the record as requested by the student, the University will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
- The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception that permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the University in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official acts in any of the following capacities: is performing a task that is specified in his or her position description or contract agreement, related to a student's education or to the discipline of a student: providing a service or benefit relating to the student or the student's family (e.g., counseling, job placement, financial aid, etc.); or maintaining the safety and security of the campus. Upon request, the University may disclose education records without a student's consent to officials of another school in which that student seeks or intends to enroll.
- The right to file a complaint with the U.S. Department of Education concerning alleged failures by National University to comply with the requirements of FERPA. The name and address

of the Office that administers FERPA is:

Family Policy Compliance Office U.S. Department of Education 400 Maryland Avenue, SW Washington, DC 20202-4605

Directory information at National University is limited to the following public information:

- Name of student
- Date of birth
- Place of birth
- Major field of study
- Dates of enrollment
- Degrees and dates conferredAcademic honors and awards received
- Addresses, telephone numbers, and e-mail addresses of alumni will be placed in the Alumni Directory
- Any other personal information voluntarily provided by alumni to be distributed to other alumni

If students do not want the University to release directory information they must submit the FERPA Request for Non Disclosure Form to the Office of the Registrar. This form is found on the student web portal. For more information, and for particular questions with respect to a student's rights under FERPA, students should contact the Office of the Registrar at 858-642-8260 or e-mail registrar@nu.edu.

## Academic Policies and Procedures

Some degree programs may have additional policies and procedures. Please see the appropriate section of the catalog for more information.

## Grade Appeals

Faculty members are vested with the authority to establish course requirements and standards of performance. It is the responsibility of faculty to articulate and communicate course requirements and standards of performance to students at the beginning of each course and apply all grading criteria uniformly and in a timely manner. Final grades submitted by faculty to the Registrar's Office are presumed to be accurate and final. A student, who has questions about a grade received in a course, should ordinarily seek to resolve the issue by first consulting with the instructor. If the issue has not been resolved after consultation, and the student believes there are grounds for appealing the grade, the student may invoke the gradeappeal procedure outlined below.

**Grounds for a Grade Appeal.** Students can appeal a grade only when they can document that one or a combination of the following has occurred:

- An error in calculating the grade
- Failure of the instructor to notify students clearly and promptly of the criteria for grade determination
- Assignment of a grade based on reasons other than the announced criteria and standards
- Assignment of a grade based on factors other than student achievement, e.g., personal bias
- Inconsistent or inequitably applied standards for evaluation of student academic performance
- If the student believes that the grade received is based upon unlawful discrimination, or sexual harassment, as defined in these policies and procedures, the student should proceed under the

procedures in this handbook for "Complaints Relating to Discrimination and Sexual Harassment."

**The Appeal Process.** When students believe that they have grounds for appealing a grade issued by an instructor because of an occurrence of one or more of the above mentioned circumstances, the following procedures must be followed:

The student must submit a written appeal to the School Dean within forty-five (45) days of the submission of the grade for the course. The student must provide clear documentation that demonstrates the occurrence of one or more of the above-listed grounds for appeal. Documentation may be in the form of e-mail correspondence, graded assignments, proof of timely submission, etc. The student must also provide evidence of the level of achievement in support of the particular grade that the student believes he/she should have been awarded. If the evidence meets the criteria, the dean forwards the student's written statement to the instructor for a response, which the instructor must provide within fifteen (15) days. The dean then refers all documentation to the grade appeals committee.

**Grade Appeals Committee.** A standing committee within each school in San Diego, the grade appeals committee consists of three faculty members (full-time or associate) appointed by the appropriate school dean. The grade appeals committee considers the documentation and may decide either to change or uphold the grade.

The grade appeals committee will render a final decision within thirty (30) days of receiving the grade appeal information from the dean. This decision is forwarded to the dean who informs the student, the instructor, and the Registrar's Office of the decision in writing.

The decision of the grade appeals committee on these matters is final and cannot be appealed.

## **Accelerated Study**

### **Maximum Number of Units**

Students with a superior academic record and a compelling, demonstrated need may petition the school dean for an accelerated study allowing them to be enrolled in more than 7.5 quarter units in the same term. The granting of an accelerated study is wholly at the dean's discretion. With the exception of certain approved programs, applications for acceleration must be approved a month in advance. To be eligible, students must have:

- 1) Completed 13.5 quarter units at National University prior to the request
- 2) Maintained a 3.5 grade point average for undergraduates or a 3.7 for graduates
- 3) Completed all prior coursework with no outstanding grades of "Incomplete"
- 4) Maintained a current account balance, i.e., the balance should not exceed the current month's tuition. Note: This requirement can be waived if the student has an approved financial aid packet in the Financial Aid Office or an approved company-reimbursement plan on file in the Student Accounts Office
- 5) Demonstrated a compelling, exceptional need

Students who believe that they meet the above requirements should submit their e-form well in advance of the anticipated course start date since processing time is six (6) to eight (8) weeks.

Approval to take more than 18 units in a quarter requires advance approval from the Committee on the Application of Standards. Students are not approved to accelerate their studies every month or to take more than two classes in one month. If students meet all of the above conditions, they should take the following steps:

- 1) Fill out an Accelerated Study Request, available as an e-form on the student portal, or see an admissions advisor for assistance
- 2) The e-form must include justification of the special circumstances that necessitate an accelerated study

## Additional Considerations

- With regard to summer intensive programs, students who wish to accelerate may take either a summer intensive course with an evening course or two summer intensive courses in the same month, provided that they meet the above criteria.
- Students in the Master of Arts in Counseling Psychology who have a GPA of 3.0 may take a regular evening course simultaneously with PSY 631B, Practicum for MFT Trainees.

### **Independent Study**

Independent study is a catalog course taught independently to one student. Not all courses in the catalog are approved for independent study. Under certain conditions and circumstances, students may be approved to take a course through independent study. Convenience or the desire to graduate early are not considered valid reasons. Approval is at the discretion of the school dean. Students who believe that they have a justifiable reason for an independent study should submit their request well in advance of the anticipated start date because processing time is six (6) to eight (8) weeks.

To be considered eligible to apply, ALL of the following conditions must be met:

- 1) The course must be approved for independent study
- 2) The student must be evaluated by the Office of the Registrar
- 3) The student must have completed 13.5 quarter units in residence with a grade point average of 3.0 or higher.
- The student must have no grades of "Incomplete" at time of application
- 5) The student must have no more than one other independent study at the current degree level
- 6) The student must have a current account balance

If a required class is cancelled and not available either onsite or online for at least four months, students may request special consideration to waive the above requirements. Students should submit the e-form with their advisor's assistance (see below) and notate this information.

Students taking an independent study course are expected to meet all of the course competencies and are evaluated according to criteria similar to those employed in normal offerings of the course (i.e., written examination and/or a substantive, interpretive research paper).

If students meet all of the above conditions, they should take the following steps:

- 1) See an Admissions Advisor and request that an independent study request, available as an e-Form, be submitted.
- 2) The e-Form must include justification of the special circumstances that necessitate an independent study

If the department chair or school dean approves the independent study, the Office of Academic Services adds the class to the student's schedule. The school will notify the instructor and the student of the scheduled class dates.

Work on the independent study cannot begin until the student and the instructor have been placed in the scheduled course and notified of the class dates. Students who are not approved for an independent

study are notified by the school via e-mail.

If an instructor submits a grade of "Incomplete," the instructor must also notate the date when the grade of "I" is entered. "Incomplete" grades that are not removed before the time limit become permanent grades of "F" or "U" as appropriate for the course. Standard tuition charges apply to independent study classes.

### **Guided Study**

Guided study is an individualized course that deals with material not covered in any approved catalog course. Guided study course numbers are typically XXX 490 or XXX 690. Students in guided study courses work independently under the guidance of an instructor. Guided studies follow the same approval process as independent studies and students must meet the eligibility requirements as indicated under the independent study section. Requests should be made well in advance of the desired start of the guided study.

## Change of Academic Program

Students may apply for a change of academic program at any time, provided they are not on probation or disqualified from their current program. Application for such a change does not mean automatic acceptance into the new program, which occurs only when the Office of the Registrar changes the student's program on their official record. Students on probation must submit their request for a change of program to the Committee on the Application of Standards for approval. Students who change academic programs will be subject to the requirements of the new program in effect in the current catalog at the time of the change. Students must be aware that courses taken in the program they are exiting might not apply toward the new program. For financial aid purposes, the University will not include in the calculation of a student's Satisfactory Academic Progress (SAP) standing the credits attempted and grades earned that do not count toward the student's new major. The University will count credit earned as it applies toward the current program. The third (3rd) and any subsequent applications for a change in program must be accompanied by a letter of intent approved by the Committee on the Application of Standards. The letter should explain the reason for the change along with the plan for completion.

### Practicums, Internships, and Residencies

Students may be required to take practical training courses in the form of internships, practicums, or residencies depending on the academic discipline in which they are enrolled. This training may be accomplished at National University facilities or at offsite locations, depending on the specialty. All such courses share commonalities, including:

- Students must register in advance
- University instructors are responsible for developing course requirements and supervising the progress of students
- Regular meetings between students and instructors provide opportunities for guidance and evaluation. These interactions are generally held on a weekly basis.
- Practical training experiences require significantly more time than a regular course
- Students are evaluated on their progress and assigned either a letter grade or a satisfactory/unsatisfactory grade, as determined by the appropriate academic department. The satisfactory grade is not calculated into the student's GPA.
- All practicums, internships, or residencies are granted full credit toward graduation, do not extend degree requirements, and are mandatory in several degree and credential programs
- Student teaching field experience does not grant graduate credit, but is required for degree conferral as part of a joint master's/credential program

- Standard tuition charges apply
- Students who do not complete practicums, internships, or residencies in the time allotted are issued either a grade of Incomplete (I) or In Progress (IP), depending on the approved grading criteria for the course. Students must complete the "I" or "IP" within the time specified. Students who fail to complete the course by the required completion date receive the grade of "F" or "U", as appropriate for the grading criteria of the class.

Students should consult the academic program requirements for further information. Veterans should contact the Veterans Affairs office at National University to determine how enrollment in such courses may affect benefits.

### **Concurrent Enrollment at Other Institutions**

After students are admitted to National University, all courses leading to an associate, credential, bachelor's degree, or master's degree must be taken at National University unless written approval to take coursework at another institution is given in advance by the Office of the Registrar. Credit earned at another institution without such prior approval might not apply toward an academic program at National University. To qualify for concurrent enrollment, students must:

- 1) Have completed the admissions process and been officially evaluated.
- 2) Not exceed the maximum number of units (18 quarter units) authorized by the University for each term
- 3) Maintain a 2.0 grade point average in undergraduate studies or a 3.0 grade point average in graduate studies
- 4) Submit a "Request for Concurrent Enrollment" accompanied by a course description to the Office of the Registrar
- 5) Request that an official transcript be sent directly to the Office of the Registrar upon completion of the approved course(s)
- 6) Be in good financial standing
- 7) International students must complete 13.5 units prior to concurrent enrollment approval.
- 8) Submit the concurrent enrollment request no later than two weeks prior to the enrollment date at the other institution.

# Committee on the Application of Standards (CAS)

### **Exceptions to Academic Policies**

In cases of exceptional circumstance, students can request an exception to a published University academic policy by submitting a request to the Committee on the Application of Standards (CAS). Convenience or ignorance of a published policy does not constitute sufficient justification for a CAS request. Students should make such a request through their admissions advisor or via an e-Form on the student portal. Students must submit a letter of explanation and documentary evidence in support of the request. Each case is decided upon its own merits and the decision of the committee is final and not subject to appeal, unless there is information pertinent to the outcome which was not available at the time of the initial request. All decisions rendered by the committee are valid for one (1) year from the date the decision was made. Appeals approved by the committee will be considered null and void if a student does not take action within the allotted one (1) year time frame. CAS may require action be taken within a shorter time frame, based on the students unique circumstance and the policy to which an exception has been requested.

If students meet all of the above conditions, they should take the following steps:

1) Fill out a Committee on the Application of Standards Request,

available as an e-Form on the student portal, or see an admissions advisor for assistance

 The request must include both justification and documentation of the special circumstances that necessitate an exception to a published University policy.

### National University Institutional Review Board

The National University Institutional Review Board (NU-IRB) was established in accordance with federal regulations governing the use of human subjects in research. The NU-IRB is charged with the responsibility for review and surveillance of all research involving human subjects carried out at National University. Review and surveillance are conducted to assure the protection of the rights and welfare of all research subjects, including volunteers.

Faculty members, especially those who teach research or capstone project courses, must become knowledgeable about the IRB process. They discuss the IRB process with their students in the research and capstone project courses and provide students with the IRB forms or direct them to an electronic source where they are available. Faculty members assist students in filling out the forms and assuring that all required signatures and documentation (abstract, description of methodology, inclusion of survey instrument, preparation of consent form, etc.) are obtained before an IRB form is submitted. Even though a student may believe that their human subjects' research should qualify as exempt from review, it is necessary to submit it to the IRB to receive confirmation that it qualifies.

If a student begins the data collection before receiving the approval from the IRB, their research project will not be accepted for review.

## Civil Rights Policies and Procedures

### Complaints Relating to Discrimination or Sexual Harassment

National University is committed to maintaining a working and learning environment in which students, faculty, and staff can develop intellectually, professionally, personally, and socially. Such an atmosphere must be free of intimidation, fear, coercion, and reprisal. The University prohibits discrimination or harassment on the basis of race, ethnic or national origin, religion, age, sex, color, physical or mental disability, marital or veteran status under any program or activity offered under its control.

In keeping with this commitment, the University also maintains a strict policy that prohibits sexual harassment, which includes harassment based on gender, pregnancy, childbirth, or related medical condition and inappropriate conduct of a sexual nature. This policy applies regardless of the gender or sexual orientation of the complainant or the alleged harasser.

It is University policy that all persons should enjoy freedom from unlawful discrimination of any kind, as well as from sexual harassment, or retaliation for reporting a complaint. This policy applies to prohibit unlawful discrimination or harassment between members of the University community, including between students and other students and between students and employees or third parties, if the University has notice regarding or control over the third party. Individuals who engage in prohibited conduct will be subject to disciplinary action.

# Policies and Procedures

# Grievance Procedures for Civil Rights Violations

The University encourages prompt reporting of complaints so that a rapid response can be made and appropriate action taken. Note that reporting a complaint need not be limited to someone who was the target of the discrimination or harassment.

The following person is designated to coordinate the University's responsibilities under the law and to insure compliance with the University's policies against discrimination:

Vice President for Student Services National University 11255 North Torrey Pines Road La Jolla, CA 92037-1011 Telephone: (858) 642-8036

Any student who feels that they have been subjected to discrimination by a student or by the University through any of its employees, contractors, entities, policies, procedures, or programs may file a complaint with the Vice President for Student Services.

The University will endeavor to maintain confidentiality to the extent permitted by law. Where the complainant's desire to maintain anonymity constrains the University from attempts at establishing facts and eliminating the potential discrimination, the University will attempt to find the right balance between the complainant's desire for privacy and confidentiality and its responsibility to provide an environment free of discrimination. The University has a duty to investigate even if the student declines to file a complaint or demand action. The University may take more formal action in cases of egregious discrimination that may require complete disclosure of all relevant facts.

### Informal Procedures for Civil Rights Issues

Students who believe that they have been subjected to unlawful discrimination or harassment may use the following informal procedures to resolve their complaint. This process may be used as a prelude to filing a formal complaint or as an alternative and generally is completed within thirty (30) days. It is not necessary that this option be used. Students have the right to file a formal written complaint either initially or if they believe informal resolution is not possible. Students may, at any time, elect to stop these informal procedures.

The Student Relations Coordinator in the Office of Student Affairs will provide any member of the University community an opportunity to discuss specific concerns in a confidential setting. Assistance will be provided to:

- help the complainant understand the definition of discrimination or sexual harassment and determine if the alleged conduct would constitute discrimination or sexual harassment;
- explain the various informal and formal options available to the complainant, including strategies for the complainant to inform the offending party that the behavior is unlawful or unwelcome and should cease, action by an appropriate University official to stop the unlawful or unwelcome conduct and mediation; and
- identify various support services available to the complainant.

The student may seek a resolution of the matter through discussion with the alleged offender or person responsible for the program or for enforcing the rule or procedure. The University encourages discussion between the parties directly involved in a dispute, especially in the early stages before the parties have assumed official or public positions that may polarize the dispute and make resolution more difficult. Students may seek advice about how best

to approach this individual or to obtain other assistance, such as mediation, from their admissions advisor, the Office of Student Affairs, or any other appropriate campus officer.

If no resolution is forthcoming or if direct confrontation is deemed inappropriate, the student may report the incident(s) to the Vice President for Student Services or to the alleged offender's supervisor, if appropriate.

The campus officer who is consulted will keep a written log of discussions, which in all events will be forwarded to the Vice President for Student Services. If the dispute is resolved to the satisfaction of all parties, a memorandum stating resolution of the conflict is sent to the parties and the Vice President for Student Services will monitor the situation to prevent recurrence or retaliation.

### Formal Procedures for Civil Rights Issues

# A. Filing a Written Complaint with the Vice President for Student Services:

- The complainant must complete a complaint form. These forms are available in the Office of Student Affairs. To be processed, the complaint must be filed within 120 days of the alleged unlawful discrimination or harassment or within one-hundred twenty (120) days of the complainant's learning of the discriminatory or harassing action.
- 2) The Vice President for Student Services dates and logs all written complaints and sends the complainant an acknowledgement that the complaint is under review.
- 3) If the complaint does not meet the procedural requirements, the Vice President for Student Services immediately notifies the complainant of the specific deficiencies of the complaint. If the complaint meets the procedural requirements, the Vice President for Student Services forwards a copy of the complaint to the alleged offender or unit against which the complaint is made ("respondent").
- 4) The Vice President for Student Services will arrange appropriate interim measures when warranted to protect the parties.
- 5) The Vice President for Student Services investigates the complaint (or the Vice President's designee, who has been trained in the investigation of such complaints), meeting separately with the student and with others who are either named in the complaint or who may have knowledge of the facts. Generally, the investigation is completed within thirty (30) days from the date the Vice President for Student Services receives the complaint.

On completion of the investigation, the Vice President for Student Services will prepare a report of the witness statements and the evidence and will provide a copy to each party.

### B. A review panel is established as follows:

The complainant and respondent each nominate one student or employee who is unbiased, not involved in the complaint and willing and available to serve as a member of the panel. The nominated panel members select, by mutual agreement, another member who will serve as chair of the panel, who will conduct the hearing and rule on procedural matters. If they are unable to agree on a chair, the Vice President for Student Services makes the selection.

### C. Once the review panel is established:

The chair sets the time and place for the hearing at the earliest possible time consistent with the schedules of the parties and the panel. The date of the hearing may be postponed or extended by mutual agreement of the parties with the consent of the chair. The panel makes every reasonable effort to conduct its hearing within fourteen (14) days of the panel's formation.

The failure of any party to appear without justifiable cause will terminate that party's right of appeal.

The Vice President for Student Services reviews pertinent evidence and coordinates the hearing process by informing the panel of its role, defining the issues and ensuring that the panel is provided with the complaint, response and other appropriate information. The Vice President for Student Services serves as recorder of the proceedings and advisor to the panel, but does not vote.

The standard of review to be used in all proceedings is fundamental fairness. Strict rules of evidence and procedures are not required so long as the proceedings are conducted in a manner that allows both sides to fairly and fully explain the circumstances. Decisions regarding the admissibility of evidence and the weight to be given to pieces of evidence will be made by the chair. The burden of proof is upon the complainant to prove his or her case by a preponderance of the evidence, which means that the proof need only show that the facts are more likely to be so than not so.

The review panel proceedings will be conducted in a closed hearing. The parties will have a reasonable opportunity for oral presentation and to present written evidence. The hearing is not a legal forum and representation of parties by legal counsel is not permitted. The parties may, however, be accompanied by another member of the University community, who will act as a personal advisor with whom they may consult.

The panel will make every reasonable effort to forward its written findings to the Vice President for Student Services and to the parties within seven (7) days after the close of the hearing.

The findings will be recorded and signed by the parties and the Vice President for Student Services, except when either party disagrees with the findings of the committee and decides to appeal. Reasonable, timely, and effective action will be taken as needed to correct discriminatory effects, prevent recurrence, or remedy the complainant's loss, if any. These actions will be communicated to the complainant.

In the event disciplinary action is recommended, the respondent will be entitled to fair process provided by University rules and regulations. Only when a complaint reaches the formal process and only if it is sustained will it be recorded in the respondent's student or personnel file.

## **Appellate Procedures for Civil Rights Issues**

A party may file a written appeal within ten (10) days of receipt of the findings with the Provost. The written appeal must state the objections to the decision. Upon receipt of the appeal, the Provost will forward a copy to the other party(ies).

Parties can forward commentary to the Provost within fourteen (14) days of receipt of the appeal.

Within twenty-one (21) days following receipt of an appeal, the Provost will render a final decision.

Changes to these procedures may be made as needed to resolve problems. Any request for changes should be directed to the Vice President for Student Services. If the complaint is against the Vice President for Student Services or other officer involved in these procedures, the Provost will designate a University employee to act in their place in these complaint procedures.

If the decision finds that the complainant falsely accused another of discrimination or harassment knowingly or in a malicious manner, the complainant will be subject to appropriate sanctions.

Retaliatory action of any kind by any member of the University community against anyone seeking redress under these procedures, cooperating in the investigation, or other participation in these procedures is prohibited and will be regarded as the basis for disciplinary action.

In cases of discrimination or sexual harassment, the complainant may, at any time during the informal or formal procedure at National University, file a complaint with:

Office for Civil Rights U.S. Department of Education 50 Beale Street, Suite 7200 San Francisco, California 94105

The University will complete its investigation and make findings on a complaint filed at the University, even if a complaint has also been filed with the Office for Civil Rights.

# **Student Discipline**

Students are expected to conduct themselves in a responsible manner that reflects ethics, honor and good citizenship. They are also expected to abide by the regulations of the University. It is the students' responsibility to maintain academic honesty and integrity and to manifest their commitment to the goals of the University through their conduct and behavior. Any form of academic dishonesty, or inappropriate conduct by students or applicants, may result in penalties ranging from warning to dismissal, as deemed appropriate by the University. Students will be informed in writing of the nature of the charges against them. They will be given a fair opportunity to refute the charges and there will be provisions for appeal of a decision.

## **Drug and Alcohol Policy**

The "Drug-Free Schools and Communities Act Amendments of 1989" (Public Law 101–226) clearly stated the position which universities are expected to take with regard to drug and alcohol abuse. In support of the purpose of this legislation National University wishes to make known its concern for the health and well-being of all members of the University community—students, staff, and faculty—as well as the health and well-being of the community as a whole.

National University policy prohibits the unlawful possession, use, or distribution of illicit drugs and alcohol by students and employees on its property or as part of any of its activities. Such prohibition specifically includes, without limitation:

- Possession or use of any controlled substance, including heroin, barbiturates, cocaine, LSD, hallucinogens, and marijuana.
- The sale of any controlled substance which is in violation of local, state, or federal statutes.
- Giving alcohol to any person under the age of twenty-one (21) or the use of alcohol on campus, unless at a specifically authorized university activity.
- Any other conduct which involves a drug-related violation of local, state, or federal statutes is included in this prohibition.

Violations of this policy will result in disciplinary action or referral for prosecution according to local, state, and federal statues, or both. Disciplinary actions for violations by students will be determined by a Hearing Committee according to the process outlined in "Hearing Procedures" below.

### **Academic Dishonesty**

Academic dishonesty includes cheating, plagiarism, and any attempt to obtain credit for academic work through fraudulent, deceptive, or dishonest means. Below is a list of some forms academic dishonesty may take.

- Using or attempting to use unauthorized materials, information, or study aids in any academic exercise
- Submitting work previously submitted in another course without the consent of the instructor
- Sitting for an examination by surrogate or acting as a surrogate
- Representing the words, ideas, or work of another as one's own in any academic exercise
- · Conducting any act that defrauds the academic process

Plagiarism is the presentation of someone else's ideas or work as one's own. As such, plagiarism constitutes fraud or theft. Plagiarism or academic dishonesty in any form is a grave offense and will not be tolerated.

If an instructor determines there is sufficient evidence of academic dishonesty on the part of a student, the instructor may exercise one or more of the following options:

- Require a timed writing sample to be written on the assigned topic to determine the veracity of the suspicion
- Require that the work be rewritten
- Issue a lowered or failing grade for the assignment
- Issue a lowered or failing grade for the course
- Request formal disciplinary action by the Judicial Affairs Officer

If a student's assignment or course grade is lowered on the grounds of academic dishonesty, the instructor must inform the student that academic dishonesty figured into the calculation of the grade. The student may exercise his/her right to appeal the grade by requesting a disciplinary hearing, convened by the Judicial Affairs Officer. It is the instructor's responsibility to report any reasonable suspicion of academic dishonesty to the Judicial Affairs Officer so that such behavior may be monitored and repeat offenders identified. Notification may be made through one's department chair. Upon request for disciplinary action or upon repeated offenses, the Judicial Affairs Officer will initiate hearing proceedings that may result in disciplinary action such as probation, suspension, or expulsion.

### **Avoiding Plagiarism**

Students must give credit for any information that is not either the result of original research or common knowledge. For example, it would be necessary to give credit to an author who provided an argument about the strategic importance of the Emancipation Proclamation in the American Civil War. Conversely, major historical facts, such as the dates of the American Civil War, are considered common knowledge and do not require that credit be given to a particular author.

If a student borrows ideas or information from another author, he/she must acknowledge the author in the body of the text and on the reference page. If a student borrows the words of another author, he/she must be careful to use the author's exact words, enclose them in quotation marks, and cite the source in the body of the text and also on the reference page. If students are unsure whether or not they should cite, they are encouraged to cite. They are also encouraged to ask their instructors for guidance on this issue. Students might also consult writing handbooks such as the *Essential Little Brown Handbook* and for formatting questions refer to manuals such as *The MLA Handbook for the Humanities, The Publication Manual of the APA* for social sciences and business, and *The CBE Style Manual* for natural and applied sciences.

## Civility in the Classroom: A Code of Classroom Etiquette

Freedom of speech and expression is valued not only throughout society but also, and particularly, in the academic setting. No more is this so than in the classroom. As a diverse community of learners, students must strive to work together in a setting of civility, tolerance, and respect for each other in an environment that does not distract from the mutual commitment to academic inquiry and reflection. To that end, the following code of classroom etiquette has been established.

- When participating in class dialogue, no one monopolizes discussions to the exclusion of others, either in terms of time or opinions expressed.
- Conflicting opinions among members of a class are respected and responded to in a professional manner.
- No side conversations or other distracting behaviors are engaged in during class discussions or presentations.
- No offensive comments, language, or gestures are part of the classroom environment.
- Cell phones and other electronic devices (notebooks excepted) are placed in the "off" mode during class time.
- Children and pets (guide dogs excepted) are not brought to class.

Adherence to this code of etiquette will enable students to receive the most from their academic endeavors and should be seen as a regular and voluntary compact among faculty and students. Any infraction of this code, however, that is deemed to be materially or substantially disruptive of the learning environment is cause for removal of a student from a class or for student disciplinary proceedings.

# Reasons for Probation, Suspension, and Dismissal of Students

Students may also be disciplined for any of the following reasons:

- Academic dishonesty
- Forgery, altering University documents, or knowingly providing false information
- Disruption of the educational or administrative process of the University, by acts or expression
- Physical abuse or threat of abuse to students, University employees, or their families
- Verbal abuse or intimidation of students or University employees including shouting, use of profanity, or other displays of hostility
- Theft of University property or the property of a University employee, student, or visitor
- Vandalism or unauthorized destruction of University property or the property of a University employee, student, or visitor
- Sale or knowing possession of illegal drugs or narcotics
- Use of or being under the influence of alcohol on campus
- Possession, use, or threats of use of explosives or deadly weapons on University property
- Sexually explicit, indecent, or obscene behavior on University property or by any means of communication, including the Internet
- Sexual harassment
- Sexual assault
- Soliciting or assisting another in an act that would subject students to a serious University sanction
- Trespassing in an area of the University where the student is not authorized to be, or failure to leave immediately an area when directed by an employee of the University
- · Using University equipment or networks to violate copyrights
- Violation of the University's visitor policy
- Violation of the University's animal policy
- Violation of the University's computer regulations
- Violation of any other lawful policy or directive of the University

or its employees.

 Any action that would grossly violate the purpose of the University or the rights of those who comprise the University

Disciplinary action may include probation, suspension, or dismissal from the University. Students suspected of committing any violation of University policy are accorded procedures consistent with fair process typically before disciplinary action is imposed. However, in appropriate circumstances, students may be suspended prior to a hearing.

Any violation of University policy (including all forms of academic dishonesty) can result in a student being barred from graduate or professional schools at this or other universities. In addition, violating University policy can make a student ineligible for government commissions or other employment.

When a violation has occurred, an incident report, including the date, time, and circumstances of the alleged act, must be submitted to the Office of Student Affairs. This report includes a description of the actions of all parties involved, names of witnesses available, and documentary evidence that supports the charge. Students wishing to report a violation should file the report through the Director/Associate Director of Student Services, or a full-time/associate faculty member.

Upon receipt of the report, the Student Judicial Affairs Officer will determine if a University policy may have been violated by the student. If there is insufficient information to make that determination, the Judicial Officer will notify the person making the report. If there is sufficient information, the Judicial Officer will contact the student and initiate an investigation.

If the investigation indicates that a violation of the code of conduct has occurred, the Judicial Officer will contact the student in writing informing the student of the charges in sufficient detail, including the time and place the alleged violation occurred and the penalty that would be appropriate if the student did in fact violate the policy. If circumstances warrant it, the student may be given the option of waiving a hearing and accepting a lesser penalty. In cases that go to a hearing, disciplinary action is determined by the hearing committee. See Hearing and Appellate Procedures below.

### **Hearing Procedures**

Hearing committees consist of three (3) members. The Judicial Officer appoints two (2) members from the University faculty or administrative staff and the student selects one (1) member from the University faculty. If the student fails to provide the name of a faculty member, the Judicial Officer will select the third (3rd) member. The Judicial Officer also designates the chairperson to conduct the proceedings and report the committee's decision. Members of hearing committees must be unbiased and must not have had direct involvement in the case prior to the hearing.

Parties to the hearing are notified in writing of the hearing date, time, location and procedures at least seven (7) working days before the hearing.

Hearing procedures include the following:

- A written or electronic record of the proceedings is maintained. The hearing is closed and members of the committee will take reasonable precautions to ensure that the proceedings remain confidential, unless disclosure is required by law. A scribe or technician may be present to record the minutes.
- The proceeding is not governed by formal rules of evidence or by trial-like procedures. The procedures are those used by reasonable persons conducting a serious proceeding. The chairperson rules on all procedural questions.

- The chairperson reads the charges or complaint to the committee.
- Each side presents its case.
- Members of the committee have the right to question any of the parties or witnesses.
- Parties may be advised by legal counsel, but legal counsel may not be present during the hearing.
- The chairperson may terminate a party's right to address the committee if the party becomes abusive or persists in presenting irrelevant evidence or information.
- If either party fails to appear, the hearing will continue as if the absent party were present.
- The failure of any party to appear without justifiable cause will terminate that party's right to appeal.
- After the hearing, the committee deliberates and renders a decision by simple majority based on a preponderance of the evidence. If the committee decides to impose a penalty, it specifies the disciplinary action to be imposed.
- The Judicial Officer and the committee chairperson send written notification of the committee's decision and of the right to appeal it.

## **Appellate Procedures**

Students who believe they have been wrongfully or excessively penalized may appeal the hearing decision. Such an appeal must be requested in writing within thirty (30) days of notification of the action and must be directed to the Provost. In order for the Provost to convene an appeals committee, a student must establish that there is sufficient cause for such an appeal. It is the responsibility of the student to submit a clear, coherent, written statement providing the basis for the appeal, including any supporting documentation. For an appeal to be granted, the student must present:

- a reasonable possibility that the unfavorable decision was clearly wrong, given the hearing committee's interpretation of the evidence or in the disciplinary action imposed.
- new evidence that was not available for presentation at the original hearing and which, if true, creates a reasonable probability of a different decision. In addition, a satisfactory explanation must be provided for the failure to present such evidence at the hearing.

At the discretion of the Provost any disciplinary action previously imposed may be suspended pending disposition of the appeal.

The Provost will appoint a panel of three (3) individuals from the University's faculty, administration, or both, and will designate one of them to conduct appeal proceedings. Members of the committee must not have had direct involvement in the case prior to the appellate hearing. A meeting time is arranged within thirty (30) days of receiving of the request for an appeal. All relevant information is then considered by the committee, including the record of the proceedings of the original hearing, written statements of the case and the testimony of any witnesses for each of the opposing parties and any new evidence presented.

The hearing procedures for the appeal will be identical to the procedures for the original hearing (see Hearing Procedures). The appeal committee will make every attempt to render a decision within ten (10) working days from the date of the hearing. The committee may recommend to uphold the previous decision, mitigate sanctions, or dismiss all charges or complaints. The chairperson of the committee will send a written report of the appeal committee's recommendation, including a description of the appeal and the rationale for its recommendation, to the Provost. Within fourteen (14) days of receiving the recommendation, the student. This decision is final.

All documentation for all hearings will be kept on file.

Disciplinary expulsions are noted on student transcripts. Probation and suspension are also noted on transcripts but only for the duration of the probation or suspension.

Any retaliatory action of any kind by an employee or student of the University against any other employee or student of the University as a result of that person's seeking redress under these procedures, cooperating in an investigation, or other participation in these procedures is prohibited and will be regarded as the basis for disciplinary action.

## **Hearing Rights**

In disciplinary, administrative, grievance, and appeal hearings, parties have the following rights:

- To be present during the hearing
- To be informed of all the evidence received by the committee
- To present witnesses
- To challenge or rebut evidence or testimony presented by the opposing party
- To submit evidence on behalf of their own position
- To make a summary argument and to respond to the argument of the opposing party to bring another person to the hearing as support or as a spokesperson.

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The University of Values

# **Admission Procedures**

## **Admissions Advising**

National University offers year-round admission. Persons seeking admission to undergraduate studies at National University are unique in their specific circumstances and needs. Applicants are interviewed by an admissions advisor, who discusses the applicants' specific requirements for admission at the initial interview. All prospective and registered students receive a unique nine-digit student number.

### Faculty Advising

Upon admission to the University, students may contact a faculty advisor to assist them in making appropriate decisions about educational and career-related issues. Faculty advisors, who are listed under each degree program within this catalog, provide students the benefit of experience in professional practice and insight gathered from years of formal study in higher education. Students should direct requests for information about curriculum content, course requirements, proficiency examinations, and program goals to their faculty advisor as well. Faculty advisors help students meet University academic regulations and standards.

### Use of Social Security Number

Applicants must include their Social Security Number where indicated on the application for admission forms. The Social Security Number is used to identify student records, including records for financial aid eligibility and the disbursement and repayment of financial aid and other debts payable to the University. The Internal Revenue Service requires the university to file forms that include information such as amount paid for tuition. This information is used by the IRS to help determine whether a student, or a person claiming the student as a dependent, may take a credit or deduction on their federal income taxes.

### E-mail Address

All students should provide, if available, a valid e-mail address where indicated on the application for admission forms. National University regularly uses e-mail to communicate important announcements to its students regarding financial aid, student accounts, advising, student records, and more. As the preferred method of communication, it is important that students provide the University with an e-mail address they use frequently and notify the University if it changes. The University keeps students e-mail addresses on file with other contact information.

### Qualifications

Applicants for admission to an undergraduate degree program must meet the following requirements:

### Freshman admission applicants:

- High school graduates applying for enrollment at National University must have a high school GPA of 2.0.
- High school applicants who are within six months of completing their high school diploma may be eligible for conditional admission. See conditional admission section below.

### Transfer applicants:

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semester) units of transferable college credit (remedial-level courses are nontransferable) must have graduated from high school, passed a high school-level G.E.D. test (standard score for each section must be at least 40 with an overall score of 225), or received a Certificate of Proficiency from a State Department of Education to be accepted on a provisional basis.

- Applicants transferring from regionally accredited colleges and universities are admitted as degree students if their cumulative grade point average from all schools is 2.0 (C) or better.
- Applicants with a cumulative grade point average below 2.0 may be admitted on probationary status if the Committee on the Application of Standards (CAS) determines there is sufficient evidence of potential to complete college studies. See Probationary Admission below.
- Students who have documents from a foreign country must request a foreign credential pre-evaluation to determine eligibility through their admissions advisor.

All applicants must present preliminary evidence of prior education at the required interview with an admissions advisor. Unofficial transcripts are acceptable.

All applicants to the University must also:

- a. Complete an application for admission
- b. Execute an enrollment agreement
- c. Pay a nonrefundable application fee of \$60

\* It is strongly recommended that all undergraduate students complete the mathematics and English ACCUPLACER evaluation.

Note: If the University determines that a student does not meet stated admissions requirements, his/her studies will be interrupted. The Committee on the Application of Standards must approve any exceptions to the above admissions requirements before the applicant can be accepted for admission to the University.

### Provisional Acceptance

Undergraduate students may take courses during provisional acceptance while the Office of the Registrar awaits receipt of official transcripts from:

- All colleges and universities the student has previously attended.
  - All examinations the student has taken including CLEP, AP, DANTES, and/or Excelsior College Exams
- Military documents
  - Official Military DD295 or Official Military SMART Transcript (Navy or Marine)
  - Copy of the DD214
  - AARTS (Army/American Council on Education Registry Transcript) Transcript (Army)
  - Coast Guard Institute (Coast Guard)
  - Community College of the Air Force transcript
- High school transcripts (required if the student has less than 60 semester units [90 quarter units] of transferable coursework from previous collegiate level institutions or if the student has not attended any higher education institution). G.E.D. or high school proficiency certificates may be submitted by students who have obtained high school equivalency through an alternative route.

If the Office of the Registrar does not receive all required documentation within three months of the date of admission, the students' studies are temporarily interrupted until the Registrar receives all official documents. If the students' studies are temporarily interrupted this can affect financial aid eligibility. The Registrar will send a courtesy notification every 30 days to students in provisional status advising them of any outstanding

documentation needed for their file to be complete. Coursework satisfactorily completed during the provisional acceptance period counts toward graduation if it is consistent with specific degree program requirements.

### **Conditional Admission**

Applicants who are within six months of completing a high school diploma may apply and be conditionally admitted into a National University undergraduate program. The official admission of such students will occur when they produce, in a sealed envelope, an official transcript that shows conferral of the high school diploma. Baccalaureate courses may not be taken until proof of the student's high school diploma is provided. When the Office of the Registrar receives this official documentation, students will be considered for full admission into a National University program.

#### **Probationary Admission**

Applicants who have a cumulative grade point average below 2.0 and who are ineligible for admission must apply to the Committee on the Application of Standards (CAS). Students should work directly with an admissions advisor to submit all of the following required documentation through the CAS e-form process:

- Transcripts from all institutions the student has attended (unofficial transcripts are acceptable). High school transcripts must be included
- A copy of their mathematics and English ACCUPLACER exam scores
- A letter of intent explaining their purpose and goals for attending the University

If CAS determines that there is sufficient evidence of potential to complete college studies, it will admit the student on probation for a specific number of courses in which the student must meet all conditions of CAS. The number of courses and other requirements set as CAS conditions are individualized according to each student's situation. Students are not eligible to receive financial aid during the probationary admission period. Upon satisfactory completion of all CAS conditions, the student will be officially admitted to the University. If the student does not meet the conditions of CAS during the probationary period, he/she will not be admitted to the University.

#### Mathematics and English Evaluation

It is strongly recommended that all entering undergraduate students take the ACCUPLACER mathematics and English evaluation as part of the admissions process. The results of the evaluation are printed immediately and a copy is provided to students. Regardless of previous academic background, all students applying to any nursing program must complete both the mathematics and English ACCUPLACER exams.

First-time undergraduate students can take the ACCUPLACER evaluation tests once at no charge. Subsequent evaluations can be repeated after 14 days for a \$5 fee. The ACCUPLACER may be repeated a maximum of three (3) times.

### **Mathematics Placement**

Students may request transfer credit for lower division college-level mathematics courses completed elsewhere with a grade of "C-" or better. Remedial-level courses will not transfer or count for credit. It is recommended that students without transferable mathematics credits complete the pre-collegiate mathematics sequence, MTH 012A

and MTH 012B, prior to starting college-level mathematics. Students may test out of one or both of these classes through successful placement by ACCUPLACER.

MTH 012A and MTH 012B are remedial-level courses and do not grant collegiate credit. Grading for these courses is Satisfactory/Unsatisfactory only.

#### **English Placement**

Students may request transfer credit for lower division college-level English courses completed elsewhere with a grade of "C-" or better. Remedial-level courses will not transfer or count for credit. It is recommended that students without transferable English credits complete the pre-collegiate English course, ENG 013, prior to collegelevel English. Students may test out of ENG 013 through successful placement by ACCUPLACER.

ENG 013 is a remedial-level course and does not grant collegiate credit. Grading for this course is Satisfactory/Unsatisfactory only.

#### **Transcript Requests of Other Institutions**

Transfer credit earned at other institutions cannot be considered without official transcripts. To expedite the evaluation process, it is recommended that students request transcripts directly from all of their previous institutions or the evaluation process may be delayed.

Official transcripts should be sent by the issuing institution directly to:

Office of the Registrar National University 11355 North Torrey Pines Road La Jolla, California, 92037-1011

The Office of the Registrar will not accept hand-carried transcripts or transcripts "issued to student" as official documents unless they are in a sealed envelope from the issuing institution.

Upon request, the University will process on the student's behalf the initial request for all domestic transcripts, including payment of associated fees. If a transcript has not arrived within four weeks, the Registrar's Office will submit a second request. Thereafter, it becomes the student's responsibility to ensure that the University receives the document(s).

When the admission process is complete, any further acquisition of transcripts is the sole responsibility of the student.

The University will not process requests for foreign transcripts/documents. Students who have attended institutions in foreign countries must acquire official transcripts/documents themselves.

Transcripts from other institutions that have been presented for admission or evaluation become a part of the student's academic file and are not returned or copied for distribution.

#### Evaluation

Evaluation is the official determination of the required course of study for a student's degree and is the final step in the admission process. After the Office of the Registrar receives all official transcripts and other documents required for admission, the student's records are evaluated for transferability of credit. The course of study that a student discussed with an advisor at the initial

admissions interview is only an estimate of the course requirements for a degree. The Office of the Registrar makes the official determination regarding the applicability of previous coursework toward meeting the requirements of a particular degree program. Students will be notified by e-mail when they may view their Degree Progress Report (DPR) online through the student portal. As students progress through the program, the DPR will show coursework already completed and courses remaining to be completed. The DPR helps students, advisors, and the University to determine progress toward completion of program requirements and also serves as a graduation check.

Applications for financial aid cannot be processed until evaluation has occurred. Federal regulations require the University to determine the appropriate grade level for funding purposes.

### **Readmission Procedures**

Students who are in good standing but have a break in enrollment for 12 or more months may be readmitted to the University by submitting an application for readmission. They are required to follow the policies of the catalog in effect at the time of readmission, including the degree requirements for their program. Students must also pay a readmission fee.

## **Sources of Credit**

### Transfer Credit

National University accepts credits from regionally accredited institutions. It may also accept credits from institutions that are accredited by an agency which is a member of Council for Higher Education Accreditation (CHEA), provided that the academic quality of the institutions can be verified and the credits otherwise comply with National University guidelines. National University may also accept credits from collegiate institutions which are accredited by non-CHEA member agencies provided they are recognized by the United States Secretary of Education. Transfer of credits from agencies which are not CHEA members are subject to additional scrutiny to validate that their academic programs adhere to the standards of institutions accredited by CHEA members. Credits transferred from collegiate institutions will only be accepted if they apply to the student's degree or certificate program and if they are comparable in nature, content, and level of credit to similar coursework offered by National University. Transfer students must have been in good standing and eligible to return to the last institution in which they were enrolled. By design, remedial college credits do not meet collegiate standards and will not be accepted as transfer credits by National University.

National University makes transfer credit decisions based upon its assessment of the collegiate institution and the circumstances and performance of the student. For students transferring from non-regionally accredited institutions, National University may accept fewer transfer credits, require the student to have earned minimum grades, or accept transfer credit on a provisional basis to be validated by satisfactory coursework in residence. Under no circumstances will National University accept transfer credit for a course in which the student earned a "D+" or lower grade.

### California Community College Transfer to Triumph Program

Students who are transferring from a California Community College may be eligible for the Transfer to Triumph program. To be eligible students must meet the following requirements:

- Be in good academic standing at the time of application to National University
- Have completed their last 30 semester units at a California Community College
- Their last semester of attendance was at a California Community College and is within 24 months of their application date to National University

Further information on the Transfer to Triumph program can be found in the Scholarships section of this catalog.

### Collegiate

The maximum number of lower-division credits acceptable for transfer to an associate degree program is 58.5 quarter units (39 semester units). For a baccalaureate degree program, no more than 103.5 quarter units (69 semester units) are allowed.

The maximum number of upper-division credits acceptable for transfer is 40.5 quarter units (27 semester units). A total of 36 quarter units (24 semester units) may be accepted from the extension division of a regionally accredited university. In either case, only credits accepted by the previous institution toward degree requirements are transferable.

The maximum credit allowed in transfer for vocational/technical courses is 18 quarter units (12 semester units). The maximum credit allowed in transfer for physical education is 9 quarter units (6 semester units).

### Non-collegiate

The maximum number of credits acceptable for non-collegiate learning is 58.5 quarter units (39 semester units) for an associate degree, with a cumulative total of 67.5 quarter units (45 semester units) for a baccalaureate degree. The credits may be from the following sources:

- A maximum of 67.5 quarter units (45 semester units) may be earned at the lower-division by College-Level Examination Program (CLEP) examinations.
- No more than 22.5 quarter units (15 semester units) may be earned for:
  - 1) DANTES independent study/credit by examination courses
  - 2) Excelsior College Examinations
  - Credit recommended in the National Guide to Credit Recommendations for Non-Collegiate Courses (American Council on Education [ACE])
  - Local, state, and federal law enforcement training recommended by ACE and such credit as is listed on a transcript from a regionally accredited college.
  - 5) Departmental examinations at National University (Credit by Examination)
- A maximum of 45 quarter units (30 semester units) may be allowed for military experience and military schools that have been evaluated by ACE.
- A maximum of 45 quarter units (30 semester units) of lowerdivision credit may be allowed for clinical courses for a registered nurse who is a graduate of a three-year hospital nursing school. Up to 22.5 quarter units (15 semester units) of additional lowerdivision credit may be granted for academically equivalent coursework.

### College Level Examination Program (CLEP)

The University awards credit for successful completion of CLEP subject examinations. CLEP examination credit can be applied to

meet general education, preparation for the major, or general lowerdivision elective credit. National University awards credit for CLEP examinations in accordance with published American Council on Education (ACE) guidelines. The ACE guidelines provide a minimum score required as well as a recommendation on the amount of transfer credit that may be applied. In order to receive credit for CLEP examinations, an official CLEP transcript must be received by the Office of the Registrar. CLEP information can be found at the College Board website: www.collegeboard.com/clep.

Currently the following National University campuses offer the CLEP examinations: San Diego, Costa Mesa, Sacramento, and San Jose. For further information on testing sites please contact the Testing Center at (858) 541-7951.

Note: Students who have taken a CLEP general examination prior to 2002 may use the credit towards general education requirements, as it applies, up to a maximum of 27 quarter units or 18 semester hours. National does not accept transfer credits for the mathematics general CLEP examination.

# Defense Activity for Non-Traditional Education Support (DANTES)

DANTES Subject Standardized Tests (DSST) demonstrate collegelevel learning acquired outside of the college classroom. The tests cover material usually taught in one-semester or one-year postsecondary courses. Credit for successful completion of DSST can be applied toward general education, preparation for the major, or general elective credit. Most tests grant three semester units (4.5 quarter units) of credit. The total number of units awarded for subject exams cannot exceed 22.5 quarter units (15 semester units).

DSST are available to military personnel through the Base Education Services Officer. Further information can be found at http://getcollegecredit.com.

### Advanced Placement (AP) Exams

National University awards college credit, as recommended by ACE, for advanced placement exams passed with a score of 3, 4, or 5. An official transcript must be received in order for credit to be awarded. Further information on the AP Exams can be found at www.collegeboard.com.

### International Baccalaureate (IB)

National University awards college credit to students who successfully obtain the International Baccalaureate Diploma. Credit may also be awarded to students who score a 4, 5, 6, or 7 on individual Higher Level Exams. No credit is awarded for IB standard level passes. An official transcript must be received in order to award credit. Further information on the IB programs can be found at www.ibo.org.

### **Excelsior College Examinations**

The Excelsior College Examinations assess college-level competence acquired in non-campus settings in more than 40 arts and sciences, business, education, and nursing subjects. Credit for successful completion of an Excelsior College Examination can be applied toward general education, preparation for the major, or general lower-division elective credit. Most examinations are for three or six semester units (4.5 or 9 quarter units) of credit. The total number of units awarded for subject exams cannot exceed 22.5 quarter units (15 semester units).

Excelsior College Examination information is available through the

Testing Center in San Diego. Students should contact the Testing Center at (858) 541-7951 for further information.

### **Military Education Credit**

To be awarded credit for courses taken at military service schools on an equivalency basis, students must submit proof of discharge (Form DD-214), an "Application for the Evaluation of Educational Experiences during Military Service" (DD-295), AARTS transcript for Army personnel, Coast Guard Institute transcript for Coast Guard service members, Community College of the Air Force transcript, or a Military SMART transcript for those serving in the Navy or Marine Corps.

Students must present appropriate transcripts, certificates, or other official documents before an evaluation can be made.

Credits for military school courses apply directly to undergraduate work as it relates to the level and content of the particular degree program. The maximum amount of transfer credit granted for military education is 45 quarter units.

### **Other Non-Collegiate Credit**

National University accepts credit, to the maximum specified above, from coursework recognized by the National Guide to Credit Recommendations for Non-Collegiate Courses (American Council on Education [ACE]). Students must present appropriate transcripts, certificates, or other official documents before an evaluation can be made.

Credits for non-collegiate approved courses apply directly to undergraduate work as it relates to the level and content of the particular degree program.

# National University Credit and Challenge by Examination

### **Credit by Examination**

Currently enrolled students can obtain credit for undergraduate courses through departmental examinations, called Credit by Examination, when their training or work experience seems to provide proficiency in the subject matter of an approved course. Only a limited number of courses are approved for Credit by Examination. Students cannot challenge courses that are in the same area as an advanced course taken at National University or another regionally accredited institution. Students can obtain applications for Credit by Examination from their admissions advisors. Students must submit their petitions after they are evaluated at the University. The Office of the Registrar determines eligibility for the exam and whether an exam will be for credit or challenge, depending on the student's degree program requirements. Approval for the exam must be granted by the Office of the Registrar. Students must pay the required \$100 Credit by Examination fee to the Business Office and complete the exam within 120 days of the approval.

All Credit by Examinations must support the objectives of the student's degree program and cannot exceed 13.5 quarter units in an associate degree program or 22.5 quarter units in a baccalaureate degree program, including credits earned toward an associate's degree. Of the 22.5 quarter units permitted in a bachelor's degree, a maximum of 13.5 may consist of credit by examination at the upperdivision level. Students can earn no more than 9 quarter units in their major or minor through credit by examination. All grades are final; students cannot repeat a Credit by Examination if a previous

attempt was unsuccessful.

Credit from credit by examination counts toward graduation, but no grade points are assigned or included in calculating grade point averages. The credit cannot be used to meet residency requirements.

### Challenge by Examination

Waivers for certain University courses can only be established by departmental examination. Typically, the courses that require a departmental examination to establish an exemption (waiver) are courses in computer science, mathematics, technical subjects, or those required for licensure or a credential.

Procedures to challenge a course by examination are identical to the credit by examination procedures explained above, but the fee for a challenge by examination is \$50 rather than \$100. No credit is awarded for a waived course.

# **Course Waivers**

Occasionally, students may request to waive a course based on previous training or experience. If the student can demonstrate mastery of a subject, the department chair must submit a recommendation to the Committee on the Application of Standards (CAS) to allow the student to waive the particular course.

A course waived by CAS exempts a student from that course. Units are not awarded for a waived course, so the student may need to take a different course such as an elective in order to meet the overall unit requirements for the degree.

## Servicemembers Opportunity College (SOC) Agreement

National University is a member of Servicemembers Opportunity Colleges (SOC) Consortium and participates in the SOCNAV, SOCMAR, SOCCOAST, SOCAD, and SOCGUARD associate and bachelor's degree programs for Army, Navy, Marine Corps, Coast Guard, and National Guard personnel and their adult dependents. The SOC network programs provide active duty personnel with a means to earn an undergraduate degree from National University if they are transferred before completion of the required coursework.

National University issues a SOC Student Agreement to every activeduty service member admitted, provided that the University has received all transcripts and other required documents, such as the DD295 or SMART Transcript. The student must also satisfactorily complete one 4.5 quarter unit course in residence. National University extends the Student Agreement process to service members of the military branches noted above and their adult dependents.

Participation in the SOC network begins when a Student Agreement is issued. This agreement guarantees that National University will accept transfer credit from SOC member colleges and will confer the undergraduate degree upon successful completion of all academic requirements. A SOC Student Agreement is valid for a period of seven years. If the student requests to change their academic degree plan, a new SOC contract will be created according to the catalog in effect at the time of the request. To be eligible for an associate or bachelor's degree from National University under the terms of the Student Agreement, students must complete at least 18 quarter units in residence at National University. Military students should contact the Office of the Registrar for further information.

### Approval for the Training of Veterans

National University is approved for the training of veterans under Title 38 of the U.S. Code, Chapters 30, 31, 32, 34, and 35. The University is also authorized for active duty tuition assistance. National University students are responsible for notifying the Veterans Affairs' Department of any change of status, class schedule changes, or unsatisfactory progress.

# **Grades and Grading System**

Students who have more than three absences, excused or unexcused, cannot be awarded a satisfactory grade.

### Definition of Grades

- A Outstanding Achievement Significantly Exceeds Standards
- B Commendable Achievement Exceeds Standards
- C Acceptable Achievement Meets Standards
- D Marginal Achievement Below Standards
- F Failing
- I Incomplete

A grade of "I" may only be issued when a student has attended at least two-thirds of the course sessions and is unable to complete the requirements due to uncontrollable and unforeseen circumstances. Students must communicate these circumstances (preferably in writing) to the instructor prior to the final day of the course. If an instructor decides that an "Incomplete" is warranted, he/she issues a grade of "I" and notates the conditions for removal of the "Incomplete" in the student's record. Students receive notification via e-mail about the assignment of an "Incomplete," including the conditions for its removal. The information remains in place until the "Incomplete" is removed or the time limit for removal has passed. An "Incomplete" is not issued when the only way the student could make up the work is to attend a major portion of the class the next time it is offered. Students must resolve "Incomplete" grades no later than six months after the official course end date. Students can be required to remove an "Incomplete" in a shorter period of time at the discretion of the instructor. The Office of the Registrar sends a courtesy e-mail reminder regarding the "Incomplete" on record when four months has elapsed since the course end date, provided the instructor has not specified a shorter end date.

An "I" that is not removed within the stipulated time becomes an "F" or a "U" based on the grading criteria of the course. No grade points are assigned. The "F" is calculated in the grade point average.

#### U Unsatisfactory

A permanent grade indicating that a credit attempt was not acceptable. An "Unsatisfactory" grade merits no grade points and is not computed in the grade point average.

### W Withdrawal

Signifies that a student has withdrawn from a course after midnight of the ninth day of the class session. A "Withdrawal" is

not allowed after the twenty-first (21st) day of the session. This is a permanent mark with no grade points assigned.

S Satisfactory

Credit is granted but no grade points are assigned.

IP In Progress

A designation representing a project course that allows up to six months or more for completion. No grade points are assigned for the "IP" grade.

The following grades are assigned for selected project/practicum courses identified in the course description section of this catalog:

#### H Honors

Signifies Outstanding Achievement. No grade points are assigned.

- S Satisfactory Signifies Acceptable Achievement. No grade points are assigned.
- U Unsatisfactory

Signifies Unacceptable Achievement. No credit is granted and no grade points are assigned.

### **Plus/Minus Grading**

National University uses a plus/minus grading system. The grade of A+ is not issued. In the plus/minus system, the grade points per credit used in the calculation of the grade point average are specified below. Instructors may elect not to use the plus/minus system provided that they clearly state this in the course outline.

### **Repetition of Courses**

Students are not obligated to repeat a failed course unless it is a course required for graduation. Students may repeat, at the prevailing cost per quarter unit, any course in which an "F," "D," or "C-" grade was received. The original grade remains part of the student's permanent record, but is not considered in computing the grade point average. In order to properly document the repeated course, students must notify the Office of the Registrar that the course has been repeated.

No course can be repeated more than twice.

No course may be repeated in which a grade of "C" or higher has been earned.

### **Computing Grade Point Averages**

To compute a student's grade point average, the total number of credit units is divided into the total number of grade points. Course units count only once toward graduation requirements. "I," "W," "U," "IP," "H," and "S" designations carry no grade points and are not considered when figuring the grade point average. When a course is repeated, the original grade remains part of the permanent record but is not calculated in the grade point average.

### **Grade Points Awarded**

| A = 4.0   | A- = 3.7 |          |
|-----------|----------|----------|
| B + = 3.3 | B = 3.0  | B- = 2.7 |
| C+= 2.3   | C = 2.0  | C- =1.7  |
| D+ =1.3   | D = 1.0  | D- =0.7  |
| F = 0.0   |          |          |

### Grade Changes

All grades are final. Students are not allowed to complete additional work after the final grade has been assigned or to repeat examinations in order to improve a grade. Students may request a review of their records if the possibility of a clerical or computational error exists. (Please see the section on Grade Appeals in this catalog.)

# **Satisfactory Academic Progress**

Students attending National University are expected to maintain satisfactory academic progress in their degree program. Academic progress is defined by a qualitative measure. The qualitative academic progress is assessed by the cumulative grade point average (GPA) achieved at National University.

### Grade Point Average (GPA) Requirements

Undergraduate students must maintain a "C" (2.0) grade point average for coursework taken at National University.

All coursework completed at National University in fulfillment of major requirements must average 2.0 or higher.

All coursework completed for the minor or the concentration must average 2.0 or higher. If the required grade point average is not maintained, the minor or concentration is not awarded. If the degree requires a concentration, then the student must repeat coursework that was completed with a grade of "C-" or below until the required 2.0 GPA is obtained.

### Academic Probation

Students whose cumulative GPA falls below 2.0 for coursework taken at National University are placed on academic probation. They are allowed six courses to improve their cumulative GPA to 2.0. Students placed on academic probation are removed from this status when they have improved their cumulative GPA to 2.0 or better. Academic probation is permanently notated on official transcripts.

### Academic Disqualification

Students on academic probation who fail to raise their cumulative GPA to 2.0 within six classes will be academically disqualified from the University. To be considered for reinstatement, they must complete 12 semester units (18 quarter units) of transferable coursework at a regionally accredited institution with a GPA of no less than 2.3 and then petition the Committee on the Application of Standards. Academic disqualification is permanently notated on official transcripts.

If the faculty determines that a student should be academically dismissed for reasons other than grades, they will refer the matter to the Office of Student Affairs, which will initiate an administrative hearing process. The hearing process to be followed is identical to the one invoked for disciplinary actions, outlined in the Policies and Procedures section of this catalog.

### Interruption of Study Due to Excessive Incomplete Grades

Students who have three concurrent "Incomplete" grades will be prohibited from taking any further courses until all "Incomplete" grades have been removed. They will be allowed to resume their program when final grades have been received for all "Incomplete" grades. In the event that these "Incomplete" grades become permanent grades of "F," the student will be dismissed from the University and will not be eligible for reinstatement.

# Second Degree from National University

A second degree from National University can be granted if all course and residency requirements for the second degree have been met. Completion of an additional minor within the same degree major does not qualify for a second degree. The number of courses for a second degree varies, but at least 45 quarter units must be completed in residence in the new degree program.

## National University Memorial Degree

In the event of a student death prior to completion of degree requirements, the family may request that the board of trustees award posthumously a memorial degree in the field of the student's area and level of study, as long as the student was in good standing at the University. A family member may contact the University Registrar at 858-642-8260.

# **Catalog Rights**

Any student whose record reflects a break in enrollment for a period of 12 or more consecutive months is not eligible to retain his/her catalog rights. All other students are defined as having continuous enrollment and, as such, remain subject to the requirements of the academic program that were listed in the catalog at the time of their admission. Students who interrupt studies for a period of greater than 12 or more months must re-apply for admission. Re-admitted students are subject to all catalog requirements in existence at the time of re-enrollment.

Students who change their major after having been admitted to the University must follow the major requirements in effect at the time of such change. Students who choose to add or drop a minor are not subject to a catalog change, unless the minor is not offered in the original catalog. If the minor was not offered in the original catalog, the student must meet both major and minor requirements under the catalog in effect at the time of the requested plan change.

Students can elect to follow the requirements listed in the current catalog; however, students cannot combine requirements from their previous catalog with those in the current catalog.

Students who have been disqualified and are later approved for reinstatement (after a 12-month absence) are subject to the requirements of the catalog in effect at the time they are reinstated and re-admitted to the University.

## Graduation Requirements for Undergraduate Degrees

### **Unit and GPA Requirements**

### **Total Number of Units**

The minimum number of units required to earn an associate degree is 90 quarter units.

The minimum number of units required to earn a baccalaureate

degree is 180 quarter units. Students may be required to complete more than 180 quarter units depending upon their program of study.

### **Upper-Division Units**

The total number of upper-division units (numbered 300 through 599) required for a baccalaureate degree is 76.5 quarter units.

### **Residency Requirements**

To qualify for a certificate, students must complete two-thirds of the certificate program at National University.

To qualify for an associate degree, students must complete a minimum of 31.5 quarter units at National University.

To qualify for a baccalaureate degree, students must complete each of the following requirements at National University:

- A minimum of 45 quarter units, at least 36 units of which must be in upper-division courses (numbered 300–599)
- At least half of the upper-division units required for the major
- At least two-thirds of the upper-division units required for the minor or concentration, if a student has selected a minor or concentration, or if a concentration is required as part of the degree requirements.

Courses taken through credit by examination and credits students transfer to the University do not apply towards residency requirements.

### **GPA Requirements**

Students must meet the following GPA requirements for their degree.

- a. Minimum overall cumulative grade point average of 2.0
- b. Minimum cumulative grade point average of a 2.0 within their major coursework (unless otherwise specified)
- c. Minimum cumulative grade point average of 2.0 within their minor or concentration coursework (unless otherwise specified.)

### **General Education Requirements**

The general education curriculum furnishes students with the basic knowledge necessary to pursue any degree program. Students who fulfill the curriculum gain a strong interdisciplinary liberal arts framework geared toward problem solving. This emphasis promotes self-directed research in many academic areas that have traditionally been kept separate.

The general education program consists of a minimum of 70.5 quarter units. Of the 70.5 units, students must complete at least 4.5 units at the upper-division level and 4.5 units in diversity enriched coursework. All undergraduate students working toward any associate or baccalaureate degree must meet the University diversity requirement.

### **CSU General Education Certifications and IGETC**

National University will accept the following General Education certifications: California State University (CSU) General Education Breadth Certification and the Inter-Segmental General Education Transfer Curriculum (IGETC). All requirements for CSU General Education and IGETC must be completed and certified prior to transfer to National University. The University will not accept partial certifications. Students transferring with full certification are

typically required to take one to three upper-division general education courses at National in order to fulfill the unit requirements. Students must provide an official transcript with the certification included or a separate certification form from the community college attended.

National University has general education requirements in the following areas:

### AREA A: ENGLISH COMMUNICATION

(Minimum 15 quarter units)

# AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

### AREA C: INFORMATION LITERACY

(Minimum 4.5 quarter units)

### AREA D: ARTS AND HUMANITIES

(Minimum 13.5 quarter units)

#### AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(Minimum 13.5 quarter units)

### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(Minimum 6 quarter units required [Note: one science lab is required.])

AREA G: MODERN LANGUAGE

(Minimum 9 quarter units)

### AREA A-G: GENERAL EDUCATION ELECTIVE

(Minimum 4.5 quarter units)

Courses taken to achieve minimum collegiate-level competency in the areas of writing and mathematical concepts and systems do not satisfy any portion of the general education requirement.

### Major, Minor, and Concentration Requirements

### Preparation for the Major

Some majors require a set of introductory and/or skills courses designed to prepare students for upper-division study. Many courses taken for this purpose can also be used to satisfy general education requirements.

#### Major

Students must complete a departmental major for any bachelor's degree. Most majors consist of an integrated area of specialized study at the upper-division level and contain at least nine courses, which total at least 40.5 quarter units.

Coursework taken to meet major requirements cannot be used to meet minor or general education requirements. At least half of the required upper-division courses for the major must be completed in residence.

#### Minor

Students may take any minor with any baccalaureate degree program. Students must verify, prior to requesting a change of degree plan, that the particular combination being requested has not been duplicated by the major or specifically prohibited by the baccalaureate program. Students must also meet any entry requirements and prerequisites for the requested minor.

Completion of a minor is not required. A minor consists of a minimum of six upper-division courses that total at least 27 quarter units, unless otherwise specified. Courses in the minor cannot be used to meet the major requirements. Courses in the minor can be used to satisfy preparation for the major and general education requirements as appropriate. At least two-thirds of the units in the minor must be completed in residence.

#### Concentration

A Concentration may be required by the degree program or an optional choice for the student. A Concentration is an area of specialization related to the major that allows students to delve deeper into a focused study area. Unless otherwise specified completion of a concentration is not required. Courses in the concentration cannot be used to meet major requirements. Courses in the concentration can be used to satisfy preparation for the major and general education requirements as appropriate. At least two thirds of the units in the concentration must be completed in residence.

## **Application for Graduation**

Graduation is not automatic upon the completion of degree requirements. Students must submit the online graduation application located on the student portal within the designated application period for degree posting. Students are advised to submit their application at least three months prior to their anticipated conferral date. A \$100 processing fee is required at the time of application. Requirements for graduation include:

- 1. Satisfactory completion of student's program of study leading to a degree.
- 2. Settlement of all financial obligations with the University.

Additional graduation and commencement information can be found on the web at www.nu.edu.

\*Note: National University does not backdate degrees. Students applying for graduation will automatically be processed for the next conferral date.

#### **Graduation with Honors**

Graduation with honors is available to students whose academic record indicates superior achievement. Earned honors are noted on diplomas and official University transcripts.

Honors for associate and baccalaureate degrees are determined only by courses taken at National University. Honors are awarded according to the following grade point averages:

| Summa Cum Laude | 3.90 |
|-----------------|------|
| Magna Cum Laude | 3.70 |
| Cum Laude       | 3.50 |

Only those students who complete 45 quarter units or more in residence in their program are considered for honors awards.

\*Note: In the calculation of eligibility for honors the cumulative GPA is truncated to two decimal places. For example, if the cumulative GPA of record is a 3.695 this figure is truncated to 3.69 and the honors designation would be Cum Laude.

# **Degree Conferral**

Degrees are posted to transcripts after the close of each academic quarter, specifically on the third Sunday in January, April, July, and October. Diplomas are mailed six to eight weeks following the degree conferral date.

Annual commencement exercises are held in San Diego and Sacramento. Students may elect to attend the commencement ceremony in the location that is most convenient for them. The online Application for Degree allows the student to specify which commencement location he/she would like to attend. Detailed information with specific instructions regarding the commencement exercises is mailed to eligible students prior to each ceremony date for those who have submitted their online Application for Degree by the posted deadline to participate. Consult the University's website for the dates of commencement.

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The University of Values

# Admission

### **Admissions Advising**

National University offers year-round admission. Persons seeking admission to graduate and credential studies at National University are unique in their specific circumstances and needs. Applicants are interviewed by an admissions advisor, who discusses applicants' specific requirements for admission at the initial interview. All prospective and registered students receive a unique nine-digit student number.

### Faculty Advising

Upon admission to the University, students may contact a faculty advisor to assist them in making appropriate decisions about educational and career-related issues. Faculty advisors, who are listed under each degree program within this catalog, provide students the benefit of experience in professional practice and insight gathered from years of formal study in higher education. Students should direct requests for information about curriculum content, course requirements, proficiency examinations, and program goals to their faculty advisor as well. Faculty advisors help students meet University academic regulations and standards.

### **Use of Social Security Number**

Applicants are required to include their Social Security Number where indicated on the application for admission forms. The Social Security Number is used to identify student records, including records for financial aid eligibility and the disbursement and repayment of financial aid and other debts payable to the University. The Internal Revenue Service requires the University to file forms that include information such as amount paid for tuition. This information is used by the IRS to help determine whether a student, or a person claiming the student as a dependent, may take a credit or deduction on their federal income taxes.

### E-mail Address

All students should provide, if available, a valid e-mail address where indicated on the application for admission forms. National University regularly uses e-mail to communicate important announcements to its students regarding financial aid, student accounts, advising, grades, student records, and more. As the preferred method of communication, it is important that students provide the University with an e-mail address they use frequently and notify the University if it changes. The University keeps students e-mail addresses on file with other contact information.

## Qualifications

Applicants for admission to a graduate or post-baccalaureate program must meet one of the following five requirements:

- 1) Hold a bachelor's degree or higher from a regionally accredited college or university where an overall grade point average of 2.5 or better was achieved, or where a grade point average of 2.75 or higher was achieved in the last 90 quarter units.
- 2) Hold a bachelor's degree or higher from a regionally accredited college or university where an overall grade point average of 2.0 to 2.49 was achieved and a satisfactory score on one of the following tests:
  - Minimum score of 550 on the Graduate Management Admission Test (GMAT)
  - Minimum scores of 480 (verbal) and 570 (quantitative) the Graduate Record Examination (GRE)
  - Minimum score of 48 on the Miller Analogies Test
  - An approved, standardized program-specific exam

Note: National University's College Board Institutional Code=4557

- 3) Hold a bachelor's degree or higher from a regionally accredited college or university where an overall grade point average of 2.0 to 2.49 was achieved and have successfully completed at least 13.5 quarter units of graduate level coursework with grades of "B" or better at a regionally accredited institution.
- 4) Holders of a bachelor's degree or higher from a regionally accredited college or university where an overall grade point average of 2.0 to 2.49 was achieved may be admitted on a probationary status. See Probationary Admission section below for additional information.
- 5) Applicants who are within six months of completing a baccalaureate degree may be eligible to apply to National University under a conditional admission status. Graduate level courses may not be taken until proof of the student's baccalaureate degree is provided. See Conditional Admission section below for additional information.

\* Applicants whose higher education was completed in a foreign country must request a foreign pre-evaluation through an admissions advisor to determine eligibility for a graduate program. Applicants who are seeking any California credential must have their official documents evaluated by an approved agency and an official evaluation report must be received by the Registrar's Office.

All applicants must present preliminary evidence of prior education at the required interview with an admission advisor. Unofficial transcripts are acceptable.

All applicants to the University must also:

- A. Complete an application for admission.
- B. Execute an enrollment agreement.
- C. Pay a non-refundable application fee of \$60.
- D. Complete the program admission process.

All post-baccalaureate applicants, regardless of citizenship, whose preparatory education was principally in a language other than English, must demonstrate competence in English. Students who do not possess a bachelor's degree from a post-secondary institution where English is the language of instruction are encouraged to take the English ACCUPLACER evaluation as part of the admissions process.

The English ACCUPLACER evaluation for graduate students is advisory only and does not delay the admissions process. The results of the English evaluation are printed immediately and a copy is provided to the student. Based on the student's score, the admissions advisor recommends appropriate English courses. \* Any exceptions to the above admissions requirements must be considered by the Committee on the Application of Standards.

### **Probationary Admission**

Students whose undergraduate GPA was 2.0 to 2.49 may be accepted on probationary status. They are ineligible for official admission and will not be processed for degree evaluation or financial aid until they have completed 4.5 quarter units of graduate study with a grade of "B" or better. Students admitted on probationary status are not permitted to schedule more than one course for 4.5 quarter units during the probationary period. However, if the first required course in a student's degree program is taken using satisfactory/ unsatisfactory (S/U) grading criteria, the student may schedule the S/U course and one additional course that issues a letter grade. Students are not permitted to enroll in any other coursework until the first letter grade has been posted to their record and their probationary status has been lifted. Students should be aware that this may mean a break in enrollment of one term (month) due to the

timeframe for submission of grades by Instructors. Students who receive a grade below "B" during the probationary period are not eligible for admission to the University.

#### **Conditional Admission**

Undergraduate students in their final semester before graduation who want to be admitted and enrolled into National University for graduate study may be conditionally admitted into a postbaccalaureate program. The official acceptance of such students will occur when they produce, in a sealed envelope, an official transcript from a regionally accredited institution that shows conferral of the bachelor's degree with a cumulative GPA of 2.5 or better. Conditionally admitted students are not permitted to take postbaccalaureate or graduate level coursework until bachelor's verification has been received.

#### **Provisional Acceptance**

Students who have completed a baccalaureate degree and want to be admitted to a post-baccalaureate degree program when official transcripts are not immediately available can be provisionally accepted. Students are responsible for obtaining, from the college or university where they earned their baccalaureate degree, an official transcript in a sealed envelope. When the Office of the Registrar receives official documentation, it considers students for eligibility.

Post-baccalaureate students may take courses during provisional acceptance while the Office of the Registrar awaits receipt of official transcripts. If the Office of the Registrar does not receive the required documentation within three months of the date of admission, the student's studies are temporarily interrupted until all official documents are received. If the student's studies are temporarily interrupted this can affect financial aid eligibility. The Office of the Registrar will send a courtesy notification every 30 days to students in provisional status, advising them of what documentation remains outstanding. Students should also view their checklist, which can be found on the student web portal, to determine outstanding documents. Coursework completed satisfactorily during provisional acceptance will count toward graduation if it is consistent with specific degree program requirements.

#### Official Transcript and Bachelor's Degree Verification Requirements

Post-baccalaureate students are required to secure from the college or university where they completed their baccalaureate degree a copy of their transcript in a sealed envelope. The Office of the Registrar will not accept hand-carried transcripts or transcripts "issued to student" as official documents unless in a sealed envelope from the issuing institution.

Official transcripts should be sent by the issuing institution directly to:

Office of the Registrar National University 11355 North Torrey Pines Road La Jolla, California, 92037-1013

Transcripts from other institutions that have been presented for admission or evaluation become a part of the student's academic file and are not returned or copied for distribution.

### Evaluation

Once eligibility for admission to a post-baccalaureate program has been determined students are eligible for official evaluation. Students will be notified by e-mail that they have been evaluated and the student may view their Degree Progress Report (Graduate) online. The course of study that a student discussed with an advisor at the initial admissions interview is only an estimate of the course requirements for a degree. The Degree Progress Report (DPR) is the official notification of the coursework and other requirements that are required for the program. As students progress through the program, the DPR will show coursework already completed and the coursework remaining. The DPR helps students, advisors, and the University to determine progress toward completion of program requirements and also serves as a graduation check.

Applications for financial aid cannot be processed until evaluation has occurred.

#### **Re-admission Procedures**

Students who are in good standing but have a break in enrollment for 12 or more months may be readmitted to the University by submitting an application for readmission. They are required to follow the policies of the catalog in effect at the time of re-admission, including the degree requirements for their program. Students must also pay a re-admission fee.

## Credit

#### **Course Waivers and Unit Transfer Limits**

Students who believe that they have taken coursework at a regionally accredited institution that is applicable to their current program may submit an e-form waiver either through the student portal or with the assistance of an admissions advisor. An official course description for each course must be attached to the e-form request. Course descriptions can usually be obtained directly from the issuing institution, copied from an institution's catalog, or found online through an institution's course catalog. The Office of the Registrar must receive official transcripts from the transferring institution before a course waiver request may be submitted. If a course description is not sufficient for determining transferability, students may be required to submit a course syllabus.

Students can transfer a maximum of 13.5 quarter units at the graduate level provided that the units have not been used to satisfy the requirements of an awarded degree. Regardless of the number of units transferred to the graduate program, students must meet residency requirements of their particular program in order to be eligible for graduation. Students should refer to their particular degree program to determine the maximum amount of transfer credit that can be applied. All courses considered for graduate transfer credit must have been taken in a graduate level degree program or notated as graduate level on the issuing institution's transcript.

To be considered for a course waiver, the transferring course must have been completed with a grade of "B" (3.0) or better. No courses can be accepted in transfer as a waiver or credit where the grade earned was a "B-" or below.

If the transfer only qualifies for a waiver, the student does not have to complete the course but credit is not awarded. The Degree Progress Report will show that course requirement has been met but that zero (0) units have been awarded. This may require additional graduate-level coursework to be taken in order to satisfy the graduate unit requirements for the student's degree.

#### **Prerequisite Waivers**

Some graduate degree programs require students to complete undergraduate-level prerequisites. If a student has completed equivalent coursework at a regionally accredited institution then he/she must submit an e form course waiver request. The Registrar's Office will then review the course content and make a determination on the waiver request. No graduate transfer credit will be awarded if the course was taken as part of an undergraduate level degree or classified as an undergraduate class by the institution attended.

### Special Consideration Waivers Based on Non-Graduate Level Coursework

Students who have a course waiver approved based on a course taken through extended learning or continuing education will typically not be awarded any units. If the issuing institution recognizes the credits as meeting graduate level academic standards, notates on the transcript that the course is granted graduate level academic credit, and confirms in an official letter from their Office of the Registrar that the course would be accepted to meet a requirement in their own graduate programs, National University may consider approving and awarding credit.

When a student has acquired mastery of a subject through a concentration of undergraduate courses or through considerable experience or training, the lead faculty member may recommend that a course be waived. The lead faculty will determine the required documentation that needs to be submitted in support of the waiver. The lead faculty will then make a recommendation, which must be submitted through an e-form to the Committee on the Application of Standards.

### Time Limit

Coursework that is more than seven years old cannot be transferred into post-baccalaureate credential or degree programs. Similarly, coursework completed at National University more than seven years ago cannot be applied to post-baccalaureate credential or degree programs for re-enrolling students. Coursework that is more than seven years old must be repeated, or, with the approval of the school dean, a more recent, suitable course may be substituted.

### **Challenge by Examination**

Students in the School of Education have the option to take a challenge by examination for EDT 608 and EDT655. In order to test out of these courses, students must follow the same procedures as outlined in Academic Information for Undergraduate Degrees under the heading "Challenge by Examination." The fee for each challenge exam is \$50 and no credit is awarded. Contact a credential advisor or a local representative for more information.

Credit by examination is not allowed at the graduate level.

# Grades and Grading System

Students who have more than three absences, excused or unexcused, cannot be given a satisfactory grade.

- A Outstanding Achievement
- B Commendable Achievement
- C Marginal Achievement
- D Unsatisfactory Achievement
- F Failing
- I Incomplete

A grade of "I" may only be issued when a student has attended at least two-thirds of the course sessions and is unable to complete the requirements due to uncontrollable and unforeseen circumstances. Students must communicate these circumstances (preferably in writing) to the instructor prior to the final day of the course. If an instructor decides that an "Incomplete" is warranted, he/she issues a grade of "I" and notates the conditions for removal of the "Incomplete" in the student's record. Students receive notification via e-mail about the assignment of an "Incomplete," including the conditions for its removal. The information remains in place until the "Incomplete" is removed or the time limit for removal has passed. An "Incomplete" is not issued when the only way the student could make up the work is to attend a major portion of the class the next time it is offered. Students must resolve "Incomplete" grades no later than six months after the official course end date. Students can be required to remove an "Incomplete" in a shorter period of time at the discretion of the instructor. The Office of the Registrar sends a courtesy e-mail reminder regarding the "Incomplete" on record when four months has elapsed since the course end date, provided the instructor has not specified a shorter end date.

An "I" that is not removed within the stipulated time becomes an "F" or a "U" based on the grading criteria of the course. No grade points are assigned. The "F" is calculated in the grade point average.

U Unsatisfactory

A permanent grade given indicating that a credit attempt was not acceptable. An "Unsatisfactory" grade merits no grade points and is not computed in the grade point average.

W Withdrawal

Signifies that a student has withdrawn from a course after midnight of the ninth day of the session. A "Withdrawal" is not allowed after the twenty-first (21st) day of the session. This is a permanent mark with no grade points assigned.

S Satisfactory

Credit is granted and no grade points are assigned. This is a grade assigned for satisfactory work in practicum, residencies, and field experience courses.

IP In Progress

A designation representing a project/thesis/research/practicum/internship/field study course that allows up to 12 months for completion. No grade points are assigned for the "IP" grade.

The following grades are assigned for selected project/practicum courses identified in the course description section of this catalog:

#### H Honors

- Signifies outstanding work. No grade points are assigned. S Satisfactory
- Signifies acceptable work. No grade points are assigned. U Unsatisfactory
- Signifies unacceptable work. No credit is awarded and no grade points are assigned.

### Plus/Minus Grading

National University uses a plus/minus grading system. The grade of A+ is not issued. In the plus/minus system, the grade points per credit used in the calculation of the grade point average are specified below. Instructors may elect not to use the plus/minus system. Instructors may elect not to use the plus/minus system provided that they clearly state this in the course outline.

### **Repetition of Courses**

Students are not obligated to repeat a failed course unless it is a course required for graduation. Students may repeat, at the prevailing cost per quarter unit, any course in which an "F," "D," "C", or "B-" grade was received. The original grade earned remains part of the student's permanent record, but is not considered in computing the grade point average. In order to properly document the repeated course, students must notify the Office of the Registrar that the course has been repeated.

No course can be repeated more than twice.

A course in which a grade of "B" or higher has been earned may not be repeated.

#### **Grade Changes**

All grades are final. Students are not allowed to complete additional work after the final grade has been assigned or to repeat examinations in order to improve a grade. Students may request a review of their records if the possibility of a clerical or computational error exists. (Please see the section on Grade Appeals in this catalog.)

### **Computing Grade Point Averages**

To compute a student's grade point average (GPA), the total number of credit units is divided into the total number of grade points. Course units count only once toward graduation requirements. "H," "I," "IP," "S," "U," and "W" carry no grade points and are not considered in computing the grade point average. When a course is repeated, the original grade is excluded from the GPA calculation but remains part of the permanent record.

### Grade Points Awarded

| A = 4.0  | A- = 3.7 |          |
|----------|----------|----------|
| B+ = 3.3 | B = 3.0  | B- = 2.7 |
| C+= 2.3  | C = 2.0  | C- =1.7  |
| D+ =1.3  | D = 1.0  | D- =0.7  |
| F = 0.0  |          |          |

## **Satisfactory Academic Progress**

Graduate students must maintain a cumulative grade point average (GPA) of 3.0 for all graduate work. The cumulative GPA is calculated by taking into account all graduate-level course work that has not been applied to a completed degree. Once a degree has been completed, a cumulative GPA is assigned for the course work in that degree, and the cumulative GPA calculator is reset for any future course work. If a graduate student has two or more degree and/or credential plans that are not yet completed, all the course work in those plans is used to calculate the cumulative GPA.

Students who receive a "D" or "F" grade in a required course must repeat the course. The "D" or "F" grade is calculated in the cumulative GPA until the course is satisfactorily repeated. The original grade is excluded from the GPA calculation but remains as part of the student's official academic record. In order to properly document the repeated course, students must notify the Office of the Registrar that the course has been repeated.

\*Note: Academic probation, disqualification, dismissal, and/or reinstatement are permanently noted on student's transcripts.

### Academic Probation

Students whose cumulative GPA falls below a 3.0 for coursework completed at National University are placed on academic probation. Students are allowed three courses to improve their cumulative grade point average to the required 3.0. The University **strongly** recommends that any coursework in which a letter grade of "C" or below was earned should be repeated while on probation. In this situation, if the courses are not repeated, the student may fail to raise the cumulative GPA to the required 3.0 and will be subject to disqualification.

### **Removal from Probation**

Students placed on probation will be removed from probation once they have improved their grade point average to a cumulative GPA of 3.0 or better. Satisfactory grades received while on probation count toward fulfillment of degree requirements.

### Disqualification

Students on academic probation who fail to raise their GPA to 3.0 or better during their probationary period will be disqualified from their academic program. Disqualified students cannot attend National University for the next three months (terms) following the month in which the student was disqualified. After a three-month leave from the University, students can apply for reinstatement.

Note: International students on an F-1 student visa must apply for reinstatement within 15 days of the date of disqualification due to immigration regulations regarding student visas.

### Reinstatement

Students who have been disqualified and want to be considered for reinstatement must petition the Committee on the Application of Standards (CAS.) The petition must explain the reason for the disqualification and the steps the student has taken to remedy the issues. Students **must** include supporting documentation. Students, approved by CAS, who are readmitted to the University will be placed on a "Conditional" status. CAS will indicate the conditions and time frame requirements of the reinstatement. Students who meet the conditions of CAS and achieve the required 3.0 cumulative GPA will be placed on permanent probation. Students who fail to meet the CAS conditions will be dismissed from the University.

### Interruption of Study Due to Excessive Incomplete Grades

Students who have three concurrent "Incomplete" grades will be prohibited from taking any further courses until all "Incomplete" grades have been removed. They will be allowed to resume their program when final grades have been received for all "Incomplete" grades. In the event that these "Incomplete" grades become permanent grades of "F," the student will be dismissed from the University and will not be eligible for reinstatement.

### Academic Dismissal

Post-baccalaureate students who were disqualified from, and reinstated to, their academic program on a status of permanent probation must maintain a cumulative GPA of 3.0 or better. A cumulative GPA that falls below a 3.0 will result in academic dismissal and the student is not eligible for reinstatement.

If the faculty determines that a student should be academically dismissed for reasons other than grades, they will refer the matter to the Office of Student Affairs, which will initiate a hearing process. The hearing process to be followed is identical with the one invoked for disciplinary actions.

# Second Degree from National University

Students can obtain a second master's degree from National University if they have met all course and residence requirements for the second degree. Completion of an additional area of specialization within the same degree does not qualify for a second degree. The number of courses required for a second degree varies, but at least 40.5 quarter units must be completed in residence in the new degree program. Units earned toward the first master's degree cannot be applied toward the second.

Note: An M.A. in Human Behavior cannot be earned after an M.A. in Counseling Psychology degree has been earned.

# **Catalog Rights**

Any student whose record reflects a break in enrollment for a period of 12 or more consecutive months is not eligible to retain his/her catalog rights. All other students are defined as having continuous enrollment and, as such, remain subject to the requirements of the academic program that were listed in the catalog at the time of their admission. Students who interrupt studies for a period of 12 or more months must re-apply for admission. Re-admitted students are subject to all catalog requirements in existence at the time of re-enrollment.

Students who request to change their academic program after admission must follow the catalog requirements in effect on the date they request the change.

Students can elect to change to the current catalog. However, they must meet all prerequisites and requirements for their academic program that are in effect in the current catalog. They cannot combine requirements from their previous catalog with those in the current catalog.

Students who are disqualified and are approved through CAS for reinstatement after an absence of 12 months are subject to the requirements of the catalog in effect at the time they are re-admitted to the University.

#### Additional Residency Requirements for Credential and Certificate Programs

Students in certificate programs must complete two-thirds of the required coursework at National University.

Credential candidates must complete a minimum of 31.5 quarter units in residence at National University to be recommended for a credential to the Commission on Teacher Credentialing. Courses taken online are considered to be in-residence. All credential programs must be completed with a GPA of 3.0 ("D" and "F" grades are not accepted).

The credential residency requirement does not apply to candidates for the following programs:

- CLAD certificate
- Level II Special Education
- California Reading Certificate
- Early Childhood Special Education Certificate
- Professional (Tier II) Administrative Services Credential
- An additional credential if one is previously held

## Graduation Requirements for Graduate Degrees

Each master's degree has been structured to delineate the program prerequisites, core requirements, area (s) of specialization, and electives that constitute the requirements for the degree. Each degree has a designated field of study (core) that consists of at least six courses, which total at least 27 quarter units. Not all degrees have areas of specialization.

### **Unit and GPA Requirements**

### Residency

Graduate degrees require the completion of a minimum of 45 quarter units. Students must earn a minimum of 40.5 quarter units at National University and must complete half of the core requirements and three-fourths of the area of specialization in residence.

### Field of Study and Area of Specialization GPA Requirements

Students must meet the following GPA requirements for their degree.

- a. Minimum overall cumulative grade point average of 3.0
- b. Minimum cumulative grade point average of a 3.0 within their core requirements
- c. Minimum cumulative grade point average of 3.0 within their area of specialization (if one is required or selected)

# **Application for Graduation**

Graduation is not automatic upon the completion of degree requirements. Students must submit the online graduation application located on the student portal within the designated application period for degree posting. Students are advised to submit their application at least three months prior to their anticipated conferral date. A \$100 processing fee is required at the time of application. Requirements for graduation include:

- 1. Satisfactory completion of student's program of study leading to a degree.
- 2. Settlement of all financial obligations with the University.

Additional graduation and commencement information can be found on the web at www.nu.edu.

\*Note: National University does not backdate degrees. Students applying for graduation will automatically be processed for the next conferral date.

### **Graduation with Honors**

Graduate students whose grade point average is a 3.85 or better will graduate "With Distinction." Prerequisites completed at the undergraduate level are not included in the calculation of the grade point average for graduate honors.

\*Note: In the calculation of eligibility for Honors the official cumulative GPA is truncated to two decimal places. Students must have a cumulative GPA of 3.850 or higher to be eligible for the Honors designation.

Earned honors are noted on diplomas and official University transcripts. Only students who complete 40.5 quarter units or more of their programs in residence are considered for honor awards.

# **Degree Conferral**

Degrees are posted to transcripts after the close of each academic quarter, specifically on the third Sunday in January, April, July, and October. Diplomas are mailed six to eight weeks following the degree conferral date.

### Commencement

Students are eligible to attend commencement if they will complete all degree requirements by the end of the September term for that year.

Annual commencement exercises are held in San Diego and Sacramento. Students may elect to attend the commencement ceremony in the location that is most convenient for them. The online Application for Degree allows the student to specify which commencement location he/she would like to attend. Detailed information with specific instructions regarding the commencement exercises is mailed to eligible students prior to each ceremony date for those who have submitted their online Application for Degree by the posted deadline to participate. Consult the University's website for the dates of commencement.

| General Education                      | 0  |
|--|----|
| General Education Program Requirements | 70 |
| Approved Courses                       | 71 |



The University of Values

## **General Education**

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The general education program promotes the intellectual growth of all students in National University's undergraduate degree programs. The general education curriculum assumes that undergraduates will not concentrate on a major field of study until they have completed a thorough general education program that is writing-intensive and addresses the cultural diversity of contemporary society.

Students in the general education program are advised to focus on writing and speech communication first. Students are then counseled to explore mathematical and other formal systems to develop abstract reasoning abilities and are required to take a course in informational literacy and report writing. Finally, all students are required to have a significant exposure to the natural sciences, the humanities and fine arts, and the social and behavioral sciences and modern language. Many of these courses include an examination of the human condition in a multicultural society.

The general education program has six major educational goals:

- 1) To provide students with a rigorous academic liberal arts foundation to prepare them for their majors
- 2) To assist students in correlating their undergraduate education and their career goals
- 3) To promote the critical thinking, reading and writing skills necessary for success in a complex and rapidly changing world
- 4) To increase respect for and awareness of diverse peoples and cultures
- 5) To provide an interdisciplinary education through a variety of intellectual models that advance competing critical points of view and address professional and social problems
- 6) To promote access to information technology and public access databases within the context of course research

The general education curriculum emphasizes communications, mathematics and sciences, humanities and social/behavioral sciences. Thus, the curriculum provides coherence to undergraduate education, affording the student the opportunity to:

- 1) Apply skills and concepts developed in general education courses to challenges and tasks presented in their upper division major courses
- 2) Apply skills and concepts developed in the general education courses to challenges and tasks presented in their future profession
- 3) Demonstrate critical thinking, reading and writing skills appropriate to upper-division college work
- 4) Demonstrate awareness of how diverse peoples and cultures have interacted in the past and interact in our contemporary world
- 5) Demonstrate critical awareness of the different approaches, methods and assumptions of different academic disciplines and how these are applied to professional and social problems
- 6) Access, evaluate and use information gathered through a variety of resources and technologies in developing research projects and presentations.

The general education curriculum furnishes students with the basic knowledge necessary to pursue any degree program. Students who fulfill the curriculum gain a strong interdisciplinary liberal arts framework geared toward problem solving. This emphasis promotes self-directed research in many academic areas that have traditionally been kept separate.

## **Diversity Requirement**

The diversity component serves the general education program goal of increasing respect for, and awareness of, diverse peoples and cultures. A plus[+] after any course on the list of approved general education courses signifies a diversity-enriched course. Students must complete at least one diversity-enriched course in the general education program.

## **CSU General Education Certifications and IGETC**

National University will accept the following General Education certifications: California State University (CSU) General Education Breadth Certification and the Inter-Segmental General Education Transfer Curriculum (IGETC). All requirements for CSU General Education and IGETC must be completed and certified prior to transfer to National University. The University will not accept partial certifications. Students transferring with full certification are typically required to take one to three upper-division general education courses at National in order to fulfill the unit requirements. Students must provide an official transcript with the certification included or a separate certification form from the community college attended.

## **General Education Program** Requirements

The general education program consists of a minimum of 70.5 quarter units. Of the 70.5 quarter units, students must complete at least 4.5 units at the upper-division level and 4.5 units in diversity enriched coursework. All undergraduate students working toward any associate or bachelor's degree must meet the University's diversity requirement.

National University has general education requirements in the following eight areas:

#### AREA A: ENGLISH COMMUNICATION (Minimum 15 quarter units)

## AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

## AREA C: INFORMATION LITERACY (Minimum 4.5 quarter units)

AREA D: ARTS AND HUMANITIES (Minimum 13.5 quarter units)

#### AREA E: SOCIAL AND BEHAVIORAL SCIENCES (Minimum 13.5 quarter units)

AREA F: PHYSICAL AND BIOLOGICAL SCIENCES (Minimum 6 quarter units required [Note: one science lab is required])

AREA G: MODERN LANGUAGE (Minimum 9 quarter units)

#### **AREA A-G: GENERAL EDUCATION** (Minimum 4.5 quarter units)

Courses taken to achieve minimum levels of collegiate-level competency in the areas of writing and mathematical concepts and systems do not satisfy any portion of the general education requirement.

## **Approved Courses**

## AREA A: ENGLISH COMMUNICATION

(15 quarter units required)

## **CATEGORY 1 – Writing**

(10.5 quarter units required)

| ENG 100  | Effective College English I (3 quarter units)  |
|----------|--|
|          | (Prerequisite: Placement Exam)                 |
| ENG 101  | Effective College English II (3 quarter units) |
|          | (Prerequisite: ENG 100)                        |
| ENG 240  | Advanced Composition                           |
|          | (Prerequisites: ENG 100/101)                   |
| or       |  |
| ENG 334A | Technical Writing                              |
|          | (Prerequisites: ENG 100/101)                   |

(Only Business and Engineering majors may fulfill the requirement by taking ENG 334A)

## **CATEGORY 2 – Speech and Communications**

| (4.5) | quarter | units | required) |
|-------|---------|-------|-----------|
|-------|---------|-------|-----------|

| COM 100 | Introduction to Communications |
|---------|--------------------------------|
| COM 200 | Effective Communication        |

#### AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING ;)

| (Min | imum | 4.5 | quarter | units |
|------|------|-----|---------|-------|
|------|------|-----|---------|-------|

| MTH 204  | Mathematics for Business and Science                  |
|----------|---|
|          | (Prerequisite: MTH 012A and MTH 012B)                 |
| MTH 209A | Structure and Concepts of Mathematical Fundamentals I |
|          | (Prerequisite: Placement Evaluation)                  |
| MTH 210  | Introduction to Probability and Statistics            |
|          | (Prerequisite: Placement Evaluation)                  |
| MTH 215  | College Algebra and Trigonometry                      |
|          | (Accelerated Course)                                  |
|          | (Prerequisite: Placement Evaluation)                  |
| MTH 216A | College Algebra and Trigonometry I (3 quarter units)  |
|          | (Prerequisite: Placement Evaluation)                  |
| MTH 216B | College Algebra and Trigonometry II (3 quarter units) |
|          | (Prerequisite: MTH 216A)                              |
| MTH 220  | Calculus I  |
|          | (Prerequisite: MTH 215)                               |
| MTH 301  | Structure and Concepts of Mathematical Fundamentals   |
|          | II  |
|          | (Prerequisite: MTH 209A)                              |
| CSC 208  | Calculus for Computer Science I                       |
|          | (Prerequisite: MTH 215)                               |
| MNS 205  | Introduction to Quantitative Methods for Business     |
|          | (Prerequisite: Placement Evaluation)                  |
| NSG 322  | Introduction to Biomedical Statistics                 |
|          | (open only to students in the B.S.N. Degree Plan)     |
|          |   |

## AREA C: INFORMATION LITERACY

(4.5 quarter units required)

| ILR 260 | Information Literacy and Report Writing |
|---------|---|
|         | (Prerequisites: ENG 100/101)            |

## **AREA D: ARTS AND HUMANITIES**

(13.5 quarter units required)

| ART 100  | Introduction to Art History                |
|----------|--|
|          | (Prerequisites: ENG 100/101)               |
| ART 200  | Visual Arts                                |
| ART 200A | Visual Arts Laboratory (1.5 quarter units) |
|          | (Prerequisite: ART 200)                    |

| HIS 233 | World Civilization I         |
|---------|------------------------------|
|         | (Prerequisites: ENG 100/101) |
| HIS 234 | World Civilization II        |
|         | (Prerequisites: ENG 100/101) |
| LIT 100 | Introduction to Literature   |
|         | (Prerequisites: ENG 100/101) |
| LIT 345 | Mythology                    |
|         | (Prerequisites: LIT 100)     |
| MUS 100 | Fundamentals of Music        |
| MUS 327 | World Music (+)              |
|         | (Prerequisites: ENG 100/101  |
| THR 200 | Theater Arts                 |
| PHL 100 | Introduction to Philosophy   |
|         | (Prerequisites: ENG 100/101) |

## **AREA E: SOCIAL AND BEHAVIORAL SCIENCES** (13.5 quarter units required)

| COM 220  | Media Literacy                       |
|----------|--------------------------------------|
| COM 380  | Democracy in the Information Age [+] |
|          | (Prerequisites: ENG 100/101)         |
| ECO 203  | Principles of Microeconomics         |
| ECO 204  | Principles of Macroeconomics         |
| HIS 220A | History of the United States I [+]   |
|          | (Prerequisites: ENG 100/101)         |
| HIS 220B | History of the United States II [+]  |
|          | (Prerequisites: ENG 100/101)         |
| HIS 300  | Foundations of Western Civilization  |
|          | (Prerequisites: ENG 100/101)         |
| HIS 350  | Cultural Diversity [+]               |
|          | (Prerequisites: ENG 100/101)         |
| POL 100  | Introduction to Political Science    |
|          | (Prerequisites: ENG 100/101)         |
| POL 201  | American Government and Politics     |
|          | (Prerequisites: ENG 100/101)         |
| PSY 100  | Introduction to Psychology           |
| SOC 100  | Principles of Sociology (+)          |
|          | (Prerequisites: ENG 100/101)         |
| SOC 260  | Cultural Anthropology                |
|          | (Prerequisites: ENG 100/101)         |

## AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(6 quarter units required)

(Note: One science lab is required at 1.5 quarter units)

| SCI 100  | Survey of Bioscience  |
|----------|---|
| SCI 100A | Survey of Bioscience Laboratory (1.5 quarter units)         |
|          | (Prerequisite: SCI 100)                                     |
| SCI 101  | Introduction to Chemistry                                   |
|          | (Recommended: prior completion of MTH 204 or MTH            |
|          | 215 or MTH 216 A/B)   |
| SCI 101A | , , , , , , , , , , , , , , , , , , ,                       |
|          | (Prerequisite: SCI 101)                                     |
| SCI 103  | Fundamentals of Geology                                     |
| SCI 103A | 0, , , , , , , , , , , , , , , , , , ,                      |
|          | (Prerequisite: SCI 103)                                     |
| SCI 104  | General Physics   |
|          | (Prerequisite: Two years of high school algebra and MTH 204 |
|          | or MTH 215 or MTH 216A/B)                                   |
| SCI 104A | General Physics Laboratory (1.5 quarter units)              |
|          | (Prerequisite: SCI 104)                                     |
| SCI 201  | Human Anatomy and Physiology I                              |
|          | (Recommended: prior completion of SCI 100 & 100A,           |
|          | SCI 101 & 101A, or equivalent courses.)                     |
| SCI 201A | Human Anatomy and Physiology Laboratory I (1.5              |
|          | quarter units)  |
|          | (Prerequisite: SCI 201)                                     |
| SCI 202  | Human Anatomy and Physiology II                             |
|          | (Recommended: prior completion of SCI 100 & 100A,           |
|          | SCI 101 & 101A, or equivalent courses.)                     |
|          |   |

| SCI 202A | Human Anatomy and Physiology Laboratory II (1.5               |
|----------|---|
|          | quarter units   |
|          | (Prerequisite: SCI 202)                                       |
| SCI 203  | Introduction to Microbiology                                  |
|          | (Recommended: prior completion of SCI 201 & 201A,             |
|          | SCI 202 & 202A, SCI 100 & 100A, SCI 101 & 101A, or            |
|          | equivalent courses.)  |
| SCI 203A | Introduction to Microbiology Laboratory I (1.5 quarter units) |
|          |   |
|          | (Prerequisite: SCI 203)                                       |

## AREA G: MODERN LANGUAGE

(9 quarter units required)

In addition to the coursework listed below, students may satisfy this area by passing a competency test in a second language. Secondlanguage competency testing is arranged through the National University Testing Center (testingservices@nu.edu). It may not be possible to accommodate requests for competency testing in languages not taught at National University. Students who satisfy competency by examination must still meet the overall general education unit requirement.

| ARB 100   | Beginning Arabic I  |
|-----------|---|
| ARB 101   | (Co-requisite: ARB 100A)<br>Boging Arabic II                          |
| AKD 101   | Beginning Arabic II<br>(Prerequisites: ARB 100/100A)                  |
|           | (Co-requisite: ARB 101A)  |
| ARB 200   | Intermediate Arabic I   |
|           | (Prerequisites: ARB 101/101A)   |
|           | (Co-requisite: ARB 200A)  |
| CHN 100   | Beginning Chinese I   |
|           | (Co-requisite: CHN 100A)  |
| CHN 101   | Beginning Chinese II  |
|           | (Prerequisites: CHN 100, CHN 100A)                                    |
| CLINI 200 | (Co-requisite: CHN 101A)  |
| CHN 200   | Intermediate Chinese I<br>( <i>Prerequisites: CHN 101, CHN 101A</i> ) |
|           | (Co-requisite CHN 200A)   |
| FAS 100   | Beginning Persian I   |
| 1110 100  | (Co-requisite: FAS 100A)  |
| FAS 101   | Beginning Persian II  |
|           | (Prerequisites: FAS 100, FAS 100A)                                    |
|           | (Co-requisite: FAS 101A)  |
| FAS 200   | Intermediate Persian I  |
|           | (Prerequisites: FAS 101/101A)   |
|           | (Co-requisite: FAS 200A)  |
| FRA 201   | Intermediate Arabic II  |
|           | (Prerequisites: ARB 200/200A)   |
| ED A 200  | (Co-requisite: FRA 201A)  |
| FRA 300   | Advanced Arabic I<br>( <i>Prerequisites: FRA 201/201A</i> )           |
|           | (Co-requisite: FRA 300A)  |
| FRA 301   | Advanced Arabic II  |
| 1101001   | (Prerequisite : FRA 300/300A)   |
|           | (Co-requisite: FRA 301A)  |
| FRC 201   | Intermediate Chinese II   |
|           | (Prerequisites: CHN 200, CHN 200A)                                    |
|           | (Co-requisite: FRC 201A)  |
| FRC 300   | Advanced Intermediate Chinese I                                       |
|           | (Prerequisites: FRC 201, 201A)  |
|           | (Co-requisite FRC 300A)   |
| FRC 301   | Advanced Intermediate Chinese II                                      |
|           | (Prerequisites: FRC 300, 300A)  |
| FRP 201   | (Co-requisite: FRC 301A)<br>Intermediate Persian II                   |
| 1 IXI 201 | (Prerequisites FAS 200, FAS 200A)                                     |
|           | (Co-requisite: FRP 201A)  |
| FRP 300   | Advanced Persian I  |
|           | (Prerequisites: FRP 201,201A)   |
|           | -   |

| FRP 301 | (Co-requisite: FRP 300A)<br>Advanced Persian II<br>( <i>Prerequisites: FRP 300/300A)</i><br>(Co-requisite: FRP 301A) |
|---------|--|
| ASL 120 | American Sign Language I   |
| ASL 220 | American Sign Language II<br>( <i>Prerequisite: ASL</i> 120)   |
| ASL 320 | American Sign Language III<br>( <i>Prerequisite: ASL</i> 220)  |
| LAS 100 | Spanish I  |
| LAS 200 | Spanish II   |
|         | (Prerequisite: LAS 100)  |
| LAS 300 | Spanish III  |
|         | (Prerequisite: LAS 200)  |
| LUS 100 | Beginning Luiseño I  |
|         | (Co-requisite: LUS 100A)   |
| LUS 101 | Beginning Luiseño II   |
|         | (Prerequisites: LUS 100/100A)  |
|         | (Co-requisite: LUS 101A)   |
| LUS 200 | Intermediate Luiseño Language I  |
|         | (Prerequisites: LUS 101/101A)  |
|         | (Co-requisite: LUS 200A)   |
| LUS 201 | Intermediate Luiseño Language II   |
|         | (Prerequisites: LUS 200/200A)  |
|         | (Co-requisite: LUS 201A)   |
| LUS 300 | Advanced Luiseño Language I  |
|         | (Prerequisites: LUS 201/201A)  |
|         | (Co-requisite: LUS 300A)   |
| LUS 301 | Advanced Luiseño Language II   |
|         | (Prerequisites: LUS 300/300A)  |
|         | (Co-requisite: LUS 301A)   |

Students also may satisfy Area G requirement with 9 quarter units of computer languages:

| CSC 242 | Introductions to Programming Concepts and Methods |
|---------|---|
|         | (Prerequisite CSC 200, CSC 208)                   |
| CSC 252 | Programming in C++                                |
|         | (Prerequisite CSC 242)                            |
| CSC 262 | Programming in Java                               |
|         | (Prerequisite: MTH 215)                           |
|         |   |

## AREA A-G GENERAL EDUCATION

(4.5 quarter units minimum)

If a student has not met the upper-division unit requirement in the completion of the above general education areas, an upper-division course from the following list must be taken. (Upper-division courses applicable to General Education are numbered 300-399). If a student has already met the upper-division unit requirement in the completion of the above general education areas, any course below or any course in Areas A through G may satisfy this Area.

| ART 315 | Film as Art                                      |
|---------|--|
|         | (Prerequisites: ENG 100/101)                     |
| ART 329 | World Art [+]                                    |
|         | (Prerequisites: ENG 100/101)                     |
| BRO 210 | History of Television                            |
|         | (Prerequisites: COM 100 or COM 200, ENG 100/101) |
| COM 360 | Representation and Diversity in the Media [+]    |
|         | (Prerequisites: ENG 100/101)                     |
| ENG 365 | Creative Writing                                 |
|         | (Prerequisites: ENG 100/101)                     |
| ENG 375 | Nature Writing                                   |
|         | (Prerequisites: ENG 100/101)                     |
| COM 380 | Democracy in the Information Age [+]             |
|         | (Prerequisites: ENG 100/101)                     |
| HIS 300 | Foundations of Western Civilization              |
|         | (Prerequisites: ENG 100/101)                     |

| HIS 350 | Cultural Diversity [+]<br>(Prerequisites: ENG 100/101) |
|---------|--|
| LIT 311 | British Literature I                                   |
|         | (Prerequisite: LIT 100)                                |
| LIT 312 | British Literature II                                  |
|         | (Prerequisite: LIT 100)                                |
| LIT 321 | American Literature I                                  |
|         | (Prerequisite: LIT 100)                                |
| LIT 322 | American Literature II                                 |
|         | (Prerequisite: LIT 100)                                |
| LIT 342 | World Literature [+]                                   |
|         | (Prerequisites: LIT 100)                               |
| MUS 326 | Survey of American Music History [+]                   |
| PHL 320 | Comparative Religion [+]                               |
|         | (Prerequisites: ENG 100/101)                           |
| PHL 332 | Religion of Islam                                      |
|         | (Prerequisites: ENG 100/101)                           |
| PHL 375 | Environmental Ethics                                   |
|         | (Prerequisites: ENG 100/101)                           |
| PSY 301 | Child Development                                      |
|         | (Prerequisites: ENG 100/101)                           |
| SCI 300 | Geography [+]  |
| SCI 301 | Earth and Planetary Science                            |
| SCI 322 | Oceanography   |
| SCI 335 | Environmental Science                                  |
| SOC 325 | Contemporary Popular Culture                           |
|         | (Prerequisites: ENG 100/101)                           |
| SOC 327 | Arabic Culture   |
|         | (Prerequisites: ENG 100/101)                           |
| SOC 336 | American Film and Society [+]                          |
|         | (Prerequisites: ENG 100/101)                           |
| SOC 344 | Marriage, Sex, and the Family                          |
|         | (Prerequisites: ENG 100/101)                           |
| SOC 352 | Modern Chinese Culture                                 |
|         | (Prerequisites: ENG 100/101)                           |
| SOC 362 | Persian Culture  |
|         | (Prerequisites: ENG 100/101)                           |
| SCI 102 | Survey of Physical Science                             |

**General Education** 

Dean, **Michael McAnear** Ph.D., Germanic Languages University of California at Los Angeles

| Degrees Offered               | 76  |
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| Faculty                       | 77  |
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The University of Values

## Degree Programs Offered

## **Undergraduate Degrees**

## Associate of Arts 🕆

## Associate of Science in Health Science and Pre-Nursing

## **Bachelor of Arts**

with Majors in: Arabic Studies Chinese Studies Comparative Literature 🖑 English 4 English with Single-Subject Matter Preparation English with a Preliminary Single Subject Credential (California) General Studies Global Studies 🖑 History ô Interdisciplinary Studies Interdisciplinary Studies with a California Preliminary Multiple Subjects Teaching Credential Mathematics with a Preliminary Single Subject Credential (California) Persian Studies Political Science Pre-Law Studies Psychology 🖑 Sociology d

## **Bachelor of Public Administration**

## **Bachelor of Science**

with Majors in: Criminal Justice Administration Domestic Security Management Environmental Science and Policy Mathematics with Concentrations in: Mathematics and Applications Single-Subject Teaching Natural Sciences with Concentrations in: Earth Science Life Science Organizational Behavior Paralegal Studies

## Foreign Credential Bridge Program

## **College of Letters and Sciences Minors**

Alternative Dispute Resolution Arabic Culture and History Arabic Studies Business Law Chinese Culture and History Chinese Studies English Global Studies History Mathematics Natural Sciences Persian Culture and History Persian Studies Political Science Pre-Law Studies Sociology

## **Graduate Degrees**

#### Master of Arts

with Fields of Study in: Counseling Psychology English ~ Human Behavior

#### **Master of Fine Arts**

with a Field of Study in: Creative Writing ී

#### Master of Forensic Sciences 🕆

with Areas of Specialization in: Criminalistics Investigation

## Master of Public Administration 🕆

with Areas of Specialization in: Alternative Dispute Resolution Human Resource Management Organizational Leadership Public Finance

## **Certificate Programs**

Alternative Dispute Resolution (Graduate and Undergraduate) Corporations Specialization Criminal Justice Administration Criminal Law Specialization Family Law Specialization Legal Assistance Litigation Specialization Paralegal Specialist Probate and Estate Planning Specialization Real Estate Law Specialization

## **General Education Curriculum**

The University's general education program links undergraduate work in writing, oral communication, critical thinking, mathematics and other skill areas with programs at the upper division level.

A number of courses address issues of cultural diversity, while the traditional goal of promoting intellectual breadth along with skill-based fundamentals has been enhanced and made more flexible.

The purpose of National University's general education program is to meet the educational objectives of adult learners who seek to strengthen their professional work and advance their creative and analytical abilities.

## **Special Programs**

#### **Center for Cultural and Ethnic Studies**

The Center for Cultural and Ethnic Studies hosts forums, workshops and cultural events with the goal of promoting diversity and intellectual curiosity at the university. These events are intended to encourage awareness of contemporary artistic, intellectual, cultural, gender and ethnic issues in daily life. In order to give these concerns intellectual context, the Center events focus specific attention on questions of race, class, and gender, historical representation, cultural images and globalization.

In practice, the Center serves as a bridge between the University and other communities. Events provide a common platform for the exchange of research and ideas by National University faculty and scholars at other institutions, artists and community activists. The work of the Center for Cultural and Ethnic Studies is to bring cultural, intellectual and artistic events of the highest caliber to the University.

Events arranged by the Center are co-sponsored and supported by numerous organizations, including the California Council for the Humanities, San Diego Public Library, African and African-American Studies Research Project at UCSD, Naval Training Center Foundation, San Diego Historical Society, Sacramento Public Library, Sacramento Philharmonic, St. Paul's Cathedral in Sacramento, and many others.

In addition to sponsoring events and encouraging discussion of contemporary intellectual and cultural issues at National University campuses throughout California, the Center for Cultural and Ethnic Studies also houses the Community Oral History Project. The mission of the Community Oral History Project at National University is to create a pedagogical tool that makes history come alive for students and show them how community history is an integral part of U.S. and world history. Students and faculty collect and process oral history interviews with persons who had been eyewitnesses to or participants in events of historical significance for deposit in the oral history collection at National University and the San Diego Historical Society. The ultimate purpose of the project is to encourage oral history scholarship at National University and in the community.

### Writing Across the Curriculum

Writing Across the Curriculum is a University-wide program that enriches all schools and areas of learning through the development of writing skills and critical thinking. The College of Letters and Sciences has developed this program to ensure that the writing needs of all disciplines are met and that the quality of writing and related skills distinguish the National University graduate. In conjunction with faculty of the other schools, the faculty of Arts and Sciences serve the entire University community by improving the skills so essential to student well being. They do this by creating writing-intensive courses, directing the Writing Centers, editing the WAC (WHACK) newsletter and the *Gnu Student Journal*.

Note: Not all online programs or courses are offered in entirety via Internet.

Note: Not all courses or programs listed in this catalog are available at every campus.

Various undergraduate minors are available in some degree programs.

FOR FURTHER INFORMATION

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## **Mission Statement**

The College of Letters and Sciences prepares students for meaningful careers and lifelong learning by developing an education that fosters the key qualities of broad-mindedness, self-assurance and competency in oral and written communication, the ability to both understand and undertake academic research, the necessary intellectual skill and zeal to identify and pursue one's chosen area of study, and a commitment to world-citizenship.

The College of Letters and Sciences (COLS) champions the philosophy of a strong liberal arts education. COLS comprises the liberal arts core of National University and is made up of a community of teaching scholars who are dynamically involved with the University at large, educating the majority of its undergraduates, cultivating and administering the general education curriculum, sponsoring innovative research centers and institutes, and offering numerous graduate degree programs.

## **Undergraduate Degrees**

## ■ ASSOCIATE OF ARTS<sup>®</sup>

(600)

Faculty Advisors: Paz Jensen • (858) 642-8471 • pjensen@nu.edu Christine Photinos • (858) 642-8349 • cphotino@nu.edu

The Associate of Arts (AA) degree is designed to give students a solid foundation for continuing professional and traditional studies as well as continued intellectual growth.

## **Degree Requirements**

To receive the AA degree, students must complete at least 90 quarter units, 31.5 of which must be taken in residence at National University. Of the 90 units required, 70.5 must fall into the areas of general education listed below. The other 19.5 quarter units can be comprised of elective courses and/or specific major program preparatory courses.

Students are urged to meet English and mathematics requirements as early as possible in their college studies to avoid serious difficulties in other coursework. Refer to the section on undergraduate admission procedures for specific information regarding application and placement evaluation.

## **General Education Program Requirements**

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The general education program consists of a minimum of 70.5 quarter units. Of the 70.5 units, students must complete at least 4.5 units at the upper-division level and 4.5 units in diversity enriched coursework. A plus [+] indicates a diversity enriched offering. All undergraduate students working toward the Associate of Arts or bachelor's degree must meet the University diversity requirement.

The general education program has six major educational goals:

- To provide students with a rigorous academic liberal arts foundation to prepare them for their majors.
- To assist students in correlating their undergraduate education and their career goals.
- To promote the critical thinking, reading, and writing skills necessary for success in a complex and rapidly changing world.
- To increase respect for and awareness of diverse peoples and cultures.
- To provide an interdisciplinary education through a variety of

intellectual models that advance competing critical points of view and address professional and social problems.

• To promote access to information technology and public access databases within the context of course research.

National University has general education requirements in the following eight areas:

## AREA A: ENGLISH COMMUNICATION

(Minimum 15 quarter units)

## AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

## AREA C: INFORMATION LITERACY

(Minimum 4.5 quarter units)

## AREA D: ARTS AND HUMANITIES

(Minimum 13.5 quarter units)

## AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(Minimum 13.5 quarter units)

## AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(Minimum 6 quarter units required [Note: one science lab is required.])

## AREA G: MODERN LANGUAGE

(Minimum 9 quarter units)

## AREA A-G: GENERAL EDUCATION

(Minimum 4.5 quarter units)

Courses taken to achieve minimum levels of collegiate-level competency in the areas of writing and mathematical concepts and systems do not satisfy any portion of the general education requirement.

## ASSOCIATE OF SCIENCE IN HEALTH SCIENCE AND PRE-NURSING (A.S. - HS)

(602-125) Faculty Advisor: Michael Maxwell • (858) 642-8413 • mmaxwell@nu.edu

The Associate of Science in Health Science and Pre-Nursing degree is designed to give students a solid foundation for continuing intellectual growth and further professional studies leading to a career in nursing or other health science-related fields.

## **Program Outcomes**

The A.S. – HS degree program prepares the graduate to be able to:

- Communicate effectively with others using oral, visual, and written methods.
- Analyze the social, physiological, and psychological aspects of human behavior at a basic level.
- Use computer technologies to augment productivity and to gain access to multiple informational resource services.
- Discuss the complexities of the human species on the continuum from the level of organism to the level of organized social being.
- Explore career options in the field of healthcare utilizing surveylevel knowledge in a variety of relevant content areas.

## **Degree Requirements**

To receive the A.S. – HS degree, students must complete at least 90 quarter units, 31.5 of which must be taken in residence at National

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University. Of the 90 units required, 42 must fall into the areas of general education listed below. Students must complete 4.5 quarter units in diversity enriched coursework. A plus (+) indicates a diversity enriched offering. All undergraduate students working toward the Associate of Science in Health Science and Pre-Nursing must meet the University diversity requirement. The other 48 units can be comprised of elective courses and/or specific major program preparatory courses.

Students are urged to meet English requirements as early as possible in their college studies to avoid serious difficulties in other coursework. Refer to the section on undergraduate admission procedures for specific information regarding application and placement evaluation.

## **Requirements for the Degree**

## AREA A: ENGLISH COMMUNICATION Category 1 Writing

(6 quarter units)

| ENG 100 | Effective College English I (3 quarter units)  |
|---------|--|
|         | (Prerequisite: Placement Exam)                 |
| ENG 101 | Effective College English II (3 quarter units) |
|         | (Prerequisite: ENG 100)                        |

## **Category 2 Speech and Communication**

(4.5 quarter units)

## COM 200 Effective Communication

## AREA C: INFORMATION LITERACY AND TECHNOLOGY

(4.5 quarter units)

| ILR 260 | Information Literacy and Report Writing |
|---------|---|
|         | (Prerequisites: ENG 100/101)            |

## AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(9 quarter units)

| PSY 100 | Introduction to Psychology   |
|---------|------------------------------|
| SOC 100 | Principles of Sociology (+)  |
|         | (Prerequisites: ENG 100/101) |

## AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(18 quarter units)

| SCI 201  | Human Anatomy and Physiology I                            |
|--|---|
|  | (Recommended: prior completion of SCI 100 & 100A, SCI 101 |
|  | & 101A, or equivalent courses.)                           |
| SCI 201A   | Human Anatomy and Physiology Laboratory I (1.5            |
|  | quarter units)  |
|  | (Prerequisite: SCI 201)                                   |
| SCI 202  | Human Anatomy and Physiology II                           |
|  | (Recommended: prior completion of SCI 201 & 201A, SCI 100 |
|  | & 100A, SCI 101 & 101A, or equivalent courses.)           |
| SCI 202A   | Human Anatomy and Physiology Laboratory II (1.5           |
|  | quarter units)  |
|  | (Prerequisite: SCI202)                                    |
| SCI 203  | Introduction to Microbiology                              |
|  | (Recommended: prior completion of SCI 201 & 201A, SCI 202 |
|  | & 202A, SCI 100 & 100A, SCI 101 & 101A, or equivalent     |
|  | courses.)   |
| SCI 203A   | Introduction to Microbiology Laboratory (1.5 quarter      |
|  | units)  |
|  | (Prerequisite: SCI203)                                    |
| (Strongly recommended: complete the SCI 201 - 203A series in |   |
| numerical sequence SCI 201 + 201A, 202 + 202A, 203 + 203A.)  |   |

## Electives

Students must complete at least 4.5 quarter units at the upperdivision level within the elective section. In addition to introductory science courses SCI 100, 100A, 101, and 101A, students are encouraged to take courses in mathematics, particularly a course involving statistical analysis such as MTH 210 or NSG 322.

## BACHELOR OF ARTS

#### (610) General Education Program Requirements

Faculty Advisors: Paz Jensen • (858) 642-8471 • pjensen@nu.edu and Christine Photinos • (858) 642-8349 • cphotino@nu.edu

The general education program consists of a minimum of 70.5 quarter units. Of the 70.5 units, students must complete at least 4.5 units at the upper-division level and 4.5 units in diversity enriched coursework. A plus [+] indicates a diversity enriched offering. All undergraduate students working toward any associate or bachelor's degree must meet the University diversity requirement.

National University has general education requirements in the following eight areas:

## AREA A: ENGLISH COMMUNICATION

(Minimum 15 quarter units)

#### AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

## AREA C: INFORMATION LITERACY

(Minimum 4.5 quarter units)

## AREA D: ARTS AND HUMANITIES

(Minimum 13.5 quarter units)

## AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(Minimum 13.5 quarter units)

## AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(Minimum 6 quarter units required [Note: one science lab is required])

## AREA G: MODERN LANGUAGE

(Minimum 9 quarter units)

## AREA A-G: GENERAL EDUCATION

(Minimum 4.5 quarter units)

Courses taken to achieve minimum levels of collegiate-level competency in the areas of writing and mathematical concepts and systems do not satisfy any portion of the general education requirement.

## Major in Arabic Studies

## (610-448) Faculty Advisor: Mahmoud Al Dabbagh • (858) 642-8444 • mdabbagh@nu.edu

The Bachelor of Arts in Arabic Studies degree consists of intensive proficiency-oriented coursework in Arabic language acquisition, as well as instruction in essential knowledge and understanding of history, culture, geography, and politics of the Arab world. The program prepares students for a variety of career paths in government, military, business, and education.

## **Degree Requirements**

To receive the Bachelor of Arts in Arabic Studies degree, students must complete at least 180 quarter units as listed below, 45 of which must be completed in residence at National University, and 76.5 of which must be completed at the upper-division level. The following courses are degree requirements. In the absence of transfer credit, general electives may be necessary to satisfy the total units required for the degree. Students should refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation. If the foreign language requirement is not completed in General Education, the equivalent must be completed as preparation for the Arabic Studies major, either by testing or equivalent transfer coursework.

## Program Outcomes

A graduate of the Bachelor of Arts in Arabic Studies will demonstrate:

- An advanced proficiency in listening and speaking Modern Standard Arabic.
- A command of both Modern Standard Arabic and colloquial regional Arabic.
- The ability to read representative modern texts in Arabic.
- An adequate knowledge of the language to translate and interpret Arabic.
- A working knowledge of Arabic grammar, morphology, and vocabulary.
- An understanding of major aspects of Arabic culture and civilization from pre-Islamic times to the present.
- A comprehensive familiarity with the history of the Arab world.
- A basic familiarity with Islam and its influence on the Arab world.

## Preparation for the Major

(9 courses; 28.5 quarter units)

| ARB 100  | Beginning Arabic I*                            |
|----------|--|
|          | (Co-requisite: ARB 100A)                       |
| ARB 100A | Beginning Arabic I Lab (1.5 quarter units)     |
|          | (Co-requisite: ARB 100)                        |
| ARB 101  | Beginning Arabic II*                           |
|          | (Prerequisite: ARB 100/100A)                   |
|          | (Co-requisite: ARB 101A)                       |
| ARB 101A | Beginning Arabic II Lab (1.5 quarter units)    |
|          | (Prerequisite: ARB 100/100A)                   |
|          | (Co-requisite: ARB 101)                        |
| ARB 200  | Intermediate Arabic I*                         |
|          | (Prerequisite: ARB 101/101A)                   |
|          | (Co-requisite: ARB 200A)                       |
| ARB 200A | Intermediate Arabic I Lab (1.5 quarter units)  |
|          | (Prerequisite: ARB 101/ 101A)                  |
|          | (Co-requisite: ARB 200)                        |
| FRA 201  | Intermediate Arabic II*                        |
|          | (Prerequisite: ARB 200/200A)                   |
|          | (Co-requisite: FRA 201A)                       |
| FRA 201A | Intermediate Arabic II Lab (1.5 quarter units) |
|          | (Prerequisite: ARB 200/200A)                   |
|          | (Co-requisite: FRA 201)                        |
| LIT 100  | Introduction to Literature*                    |
|          | (Prerequisites: ENG 100/101)                   |

\* May be used to satisfy general education requirements.

## **Requirements for the Major**

(11 courses; 43.5 quarter units)

FRA 300 Advanced Arabic I (Prerequisite: FRA 201/201A)

|          | (Co-requisite: FRA 300A)                      |
|----------|---|
| FRA 300A | Advanced Arabic I Lab (1.5 quarter units)     |
|          | (Prerequisite: FRA 200/201A)                  |
|          | (Co-requisite: FRA 300)                       |
| FRA 301  | Advanced Arabic II                            |
|          | (Prerequisite: FRA 300/300A)                  |
|          | (Co-requisite: FRA 301A)                      |
| FRA 301A | Advanced Arabic II Lab (1.5 quarter units)    |
|          | (Prerequisite: FRA 300/300A)                  |
|          | (Co-requisite: FRA 301)                       |
| FRA 400  | Advanced Arabic Conversation                  |
|          | (Prerequisite: FRA 301/301A)                  |
| SOC 327  | Arabic Culture                                |
|          | (Prerequisites: ENG 100/101)                  |
| HIS 339  | History of the Middle East 600-1600           |
|          | (Prerequisites: ENG 100/101)                  |
| HIS 342  | Modern History of the Middle East             |
|          | (Prerequisites: ENG 100/101)                  |
| PHL 332  | Religion of Islam                             |
|          | (Prerequisites: ENG 100/101)                  |
| POL 410  | Middle Eastern Politics                       |
|          | (Prerequisites: ENG 100/101)                  |
| LIT 315  | Contemporary Arabic Literature in Translation |
|          | (Prerequisite: LIT 100)                       |

## **Upper-Division Electives**

(8 courses; 36 quarter units)

Choose eight upper-division degree related electives from available offerings. The following are strongly recommended:

| GLS 430 | The Global Economy                       |
|---------|--|
|         | (Prerequisite: ENG 240)                  |
| HIS 431 | The Ancient World                        |
|         | (Prerequisites: ENG 100/101 and HIS 233) |
| HIS 434 | The Modern World, 1500 to the Present    |
|         | (Prerequisites: ENG 100/101 and HIS 234) |
| LIT 463 | 20th Century World Literature            |
|         | (Prerequisite: LIT 100)                  |
| PHL 320 | Comparative Religion                     |
|         | (Prerequisites: ENG 100/101)             |
| POL 340 | Comparative Politics                     |
|         | (Prerequisites: ENG 100/101)             |
| SOC 328 | Intercultural Thinking and Creativity    |
|         | (Prerequisites: ENG 100/101)             |
| FRA 350 | Fundamentals of Arabic Translation       |
|         | (Prerequisites: FRA 301/301A)            |

## Major in Chinese Studies

#### (610-118)

Faculty Advisor: Michael M. Day • (858) 642-8327 • mday@nu.edu

The Bachelor of Arts in Chinese Studies degree consists of intensive proficiency-oriented coursework in Chinese language acquisition, as well as instruction in essential knowledge and understanding of history, culture, geography, and politics of China. The program prepares students for a variety of career paths in government, military, business, and education.

## Program Outcomes

A graduate of the Bachelor of Arts in Chinese Studies degree should be able to demonstrate:

- An advanced proficiency in listening, speaking, reading, and writing of Modern Standard Chinese (Mandarin).
- The ability to read representative modern texts in Chinese.
- An adequate knowledge of the language to translate and interpret Chinese.

- A working knowledge of Chinese grammar, morphology, and vocabulary.
- An understanding of major aspects of Chinese culture and civilization from pre-historic times to the present.
- A comprehensive familiarity with the history of China.
- A basic familiarity with China's position in and influence on world politics and economy.

## **Degree Requirements**

To receive the Bachelor of Arts in Chinese Studies degree, students must complete at least 180 quarter units as listed below, 45 of which must be completed in residence at National University, and 76.5 of which must be completed at the upper-division level. The following courses are degree requirements. In absence of transfer credit, general electives may be necessary to satisfy the total units required for the degree. Students should refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation. If the foreign language requirement is not completed in General Education, the equivalent must be completed as preparation for the Chinese Studies major or by testing or equivalent coursework in transfer. Further questions should be addressed to the faculty advisor.

## Preparation for the Major

(8 courses and, 24 quarter units)

| CHN 100  | Beginning Chinese I*                            |
|----------|---|
|          | (Co-requisite: CHN 100A)                        |
| CHN 100A | Beginning Chinese I Lab (1.5 quarter units)     |
|          | (Co-requisite: CHN 100)                         |
| CHN 101  | Beginning Chinese II*                           |
|          | (Prerequisites: CHN 100, CHN 100A)              |
|          | (Co-requisite: CHI CHN A)                       |
| CHN 101A | Beginning Chinese II Lab (1.5 quarter units)    |
|          | (Prerequisites: CHN 100, CHN 100A)              |
|          | (Co-requisite: CHN 101)                         |
| CHN 200  | Intermediate Chinese I*                         |
|          | (Prerequisites: CHN 101, CHN 101A)              |
|          | (Co-requisite: CHN 200A)                        |
| CHN 200A | Intermediate Chinese I Lab (1.5 quarter units)  |
|          | (Prerequisites: CHN 101, CHN 101A)              |
|          | (Co-requisite: CHN 200)                         |
| FRC 201  | Intermediate Chinese II*                        |
|          | (Prerequisites: CHN 200, CHN 200A)              |
|          | (Co-requisite: FRC 201A)                        |
| FRC 201A | Intermediate Chinese II Lab (1.5 quarter units) |
|          | (Prerequisites: CHN 200, CHN 200Å)              |
|          |   |

\* May be used to satisfy general education requirements.

(Co-requisite: FRC 201)

## **Requirements for the Major**

(13 courses; 52.5 quarter units)

| FRC 300  | Advanced Intermediate Chinese I                         |
|----------|---|
|          | (Prerequisites: FRC 201, FRC 201A)                      |
|          | (Co-requisite: FRC 300A)                                |
| FRC 300A | Advanced Intermediate Chinese I Lab (1.5 quarter units) |
|          | (Prerequisites: FRC 201, FRC 201A)                      |
|          | (Co-requisite: FRC 300)                                 |
| FRC 301  | Advanced Intermediate Chinese II                        |
|          | (Prerequisites: FRC 300, FRC 300A)                      |
|          | (Co-requisite: FRC 301A)                                |
| FRC 301A | Advanced Intermediate Chinese II Lab (1.5 quarter       |
|          | units)  |
|          | (Prerequisites: FRC 300, FRC 300A)                      |
|          | (Co-requisite: FRC 301)                                 |
| FRC 400  | Advanced Chinese Conversation                           |
|          | (Prerequisites: FRC 301, 301A)                          |

| FRC 450 | Selected Readings in Modern Chinese    |
|---------|--|
|         | (Prerequisites: FRC 301, 301A)         |
| HIS 346 | Chinese History and Culture I          |
|         | (Prerequisites: ENG 100/101)           |
| HIS 355 | Chinese History and Culture II         |
|         | (Prerequisites: ENG 100/101)           |
| PHL 326 | Chinese Thought                        |
|         | (Prerequisites: ENG 100/101)           |
| POL 418 | Modern Economy and Government of China |
|         | (Prerequisites: ENG 100/101)           |
| SOC 352 | Modern Chinese Culture                 |
|         | (Prerequisites: ENG 100/101)           |
| LIT 310 | Chinese Literature in Translation      |
|         | (Prerequisite: LIT 100)                |
| COC 220 | Chinana Film and Talassiaian           |

SOC 338 Chinese Film and Television (Prerequisites: ENG 100/101)

## **Upper-Division Electives**

(8 courses; 36 quarter units) Choose eight upper-division degree related electives from available offerings. The following are strongly recommended:

| GLS 430 | The Global Economy                       |
|---------|--|
|         | (Prerequisite: ENG 240)                  |
| HIS 431 | The Ancient World                        |
|         | (Prerequisites: ENG 100/101 and HIS 233) |
| HIS 434 | The Modern World, 1500 to the Present    |
|         | (Prerequisites: ENG 100/101 and HIS 234) |
| LIT 463 | 20th Century World Literature            |
|         | (Prerequisite: LIT 100)                  |
| HIS 348 | History and Cultures of Asia             |
|         | (Prerequisites: ENG 100/101)             |
| POL 340 | Comparative Politics                     |
|         | (Prerequisites: ENG 100/101)             |
| SOC 328 | Intercultural Thinking and Creativity    |
|         | (Prerequisites: ENG 100/101)             |
|         |  |

## ◆ Major in Comparative Literature ∕⊕

(610-119)

Faculty Advisor: Luis Acebal • (530) 226-4003 • lacebal@nu.edu

The Bachelor of Arts in Comparative Literature degree offers students a course of study in literatures outside the English language tradition. The required courses for this program will take an historical approach to comparative literature and compare at least two different regions of the world within their respective historical period. The literature is read in translation in all the program's courses with the exception of LAS 310: Literary Readings in Spanish, which requires Spanish reading competency. (Students who are interested in studying literature with a focus on the English language tradition of the British Isles and the United States should enroll in the Bachelor of Arts in English program.) By comparing literary works of more than one culture within a given literary era, students will develop and expand their sense of the role of the literary arts in different cultures and languages. Because reading literary works in translation is not the same experience as reading them in their original language, the program requires that one course be comprised of literary readings in their original language.

## **Program Outcomes**

A graduate of the Bachelor of Arts in Comparative Literature degree will be able to:

- Have reading knowledge of one additional "research" language.
- Have competence in the history of one literature.
- Demonstrate knowledge in comparative analysis of literary works spanning several traditions.
- Have specialized (period focused) knowledge of two literatures.
- Be familiar with a broad range of literary, critical and cultural

theories.

- Be able to understand and contribute to issues and debates in the field of comparative and world literature.
- Evaluate the historical and literary developments of multiple national literatures.
- Conduct research using electronic databases and other relevant traditional sources.

## **Degree Requirements**

To receive the Bachelor of Arts with a Major in Comparative Literature, students must complete at least 180 quarter units as listed below, 45 of which must be completed in residence at National University, and 76.5 of which must be completed at the upperdivision level. The following courses are degree requirements. In absence of transfer credit, general electives may be necessary to satisfy the total units required for the degree. Students should refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation. If the foreign language requirement is not completed in General Education, the equivalent must be completed as preparation for the Comparative Literature major either by testing or by satisfactorily passing three courses in Spanish (\*Or equivalent preparation from another language.)

## Preparation for the Major

(4 courses; 18 quarter units)

| LIT 100 | Introduction to Literature*  |
|---------|------------------------------|
|         | (Prerequisites: ENG 100/101) |
| LAS 100 | Spanish I*                   |
| LAS 200 | Spanish II*                  |
|         | (Prerequisite: LAS 100)      |
| LAS 300 | Spanish III*                 |
|         | (Prerequisite: LAS 200)      |

\* May be used to satisfy general education requirements.

## **Requirements for the Major**

(10 courses; 45 quarter units)

| LIT 300 | Methodologies in Comparative Literature                   |
|---------|---|
|         | (Prerequisite: LIT 100)                                   |
| LAS 310 | Literary Readings in Spanish                              |
|         | (Prerequisite: LIT 100, LAS 300 or equivalent competency) |
| LIT 361 | Literature of the Ancient World                           |
|         | (Prerequisite: LIT 100)                                   |
| LIT 362 | Literature of the Middle Period                           |
|         | (Prerequisite: LIT 100)                                   |
| LIT 363 | Literature of the Early Modern World                      |
|         | (Prerequisite: LIT 100)                                   |
| LIT 461 | 18th Century World Literature                             |
|         | (Prerequisite: LIT 100)                                   |
| LIT 462 | 19th Century World Literature                             |
|         | (Prerequisite: LIT 100)                                   |
| LIT 463 | 20th Century World Literature                             |
|         | (Prerequisite: LIT 100)                                   |
| LIT 480 | Literatures of the Americas                               |
|         | (Prerequisites: LIT 100, LIT 300)                         |
| LIT 499 | Comparative Literature Capstone Course                    |
|         | (Prerequisite: Completion of all major coursework)        |
|         | , ,   |

## **Upper-Division Electives**

(6 courses; 27 quarter units)

Students must complete a minimum of 27 quarter units of electives to fulfill the upper-division unit requirements to earn the Bachelor of Arts in Comparative Literature. Students must select at least four of these courses from the English (ENG) and Literature (LIT) subject areas. The following courses are recommended:

| ENG 350 | Fundamentals of Linguistics  |
|---------|------------------------------|
|         | (Prerequisites: ENG 100/101) |
| ENG 352 | Origins of English           |
|         | (Prerequisites: ENG 100/101) |
| ENG 365 | Creative Writing             |
|         | (Prerequisites: ENG 100/101) |
| LIT 311 | British Literature I         |
|         | (Prerequisite: LIT 100)      |
| LIT 312 | British Literature II        |
|         | (Prerequisite: LIT 100)      |
| LIT 321 | American Literature I        |
|         | (Prerequisite: LIT 100)      |
| LIT 322 | American Literature II       |
|         | (Prerequisite: LIT 100)      |
| LIT 338 | Shakespeare                  |
|         | (Prerequisite: LIT 100)      |
| LIT 345 | Mythology                    |
|         | (Prerequisite: LIT 100)      |
| LIT 446 | Studies in Poetry            |
|         | (Prerequisite: LIT 100)      |
| LIT 450 | Studies in the Novel         |
|         | (Prerequisite: LIT 100)      |
| LIT 456 | Studies in Drama             |
|         | (Prerequisite: LIT 100)      |
| LIT 460 | Gender and Literature        |
|         | (Prerequisite: LIT 100)      |
|         |                              |
|         |                              |

## ♦ Major in English <sup>^</sup>

#### (610-111)

Faculty Advisor: John Miller • (714) 429-5146 • jmiller@nu.edu

The Bachelor or Arts in English provides a strong background in the study of English. The program stresses literary analysis, diversity, critical thinking, and written and oral communication skills through a rigorous curriculum of literature, composition, language and linguistics, and communication studies. It is an excellent preparation for careers in teaching, media, advertising, writing, and publishing; for graduate or professional studies in English, communications, or law; and for advancement in any field in which communication skills are important.

Note: Students interested in teaching English or Language Arts in middle or secondary schools should consider enrolling in the Single Subject Matter Preparation Program (610-114) or the major in English with Single Subject Credential (610-114-200).

#### **Program Outcomes**

Upon successful completion of the Bachelor of Arts in English degree, students should be able to:

- Demonstrate knowledge of major writers and their works and major periods of both British and American literature.
- Demonstrate the ability to analyze and interpret works of literature in a variety of genres both orally and in formal written work.
- Demonstrate understanding of major critical approaches to the interpretation of literature.
- Demonstrate the ability to analyze and interpret the use and effects of literary and rhetorical features of both literary and non-literary texts.
- Demonstrate the ability to situate and analyze literary works within historical and cultural contexts.
- Demonstrate understanding of various literary genres, their development and persistence over time, and the role of genre in the understanding and analysis of literary and non-literary texts.
- Through their writing demonstrate mastery of conventions of Standard English usage.

## **Degree Requirements**

To receive the Bachelor of Arts in English degree, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

## Preparation for the Major

(1 course; 4.5 quarter units)

| LIT 100 | Introduction to Literature * |
|---------|------------------------------|
|         | (Prerequisites: ENG 100/101) |

\*May be used to satisfy general education requirements.

## **Requirements for the Major**

(12 courses; 54 quarter units)

| LIT 311 | British Literature I  |
|---------|---|
|         | (Prerequisite: LIT 100)   |
| LIT 312 | British Literature II   |
|         | (Prerequisite: LIT 100)   |
| LIT 321 | American Literature I   |
|         | (Prerequisite: LIT 100)   |
| LIT 322 | American Literature II  |
|         | (Prerequisite: LIT 100)   |
| LIT 338 | Shakespeare   |
|         | (Prerequisite: LIT 100)   |
| LIT 342 | World Literature  |
|         | (Prerequisite: LIT 100)   |
| LIT 360 | Literary Theory   |
|         | (Prerequisite: LIT 100)   |
| LIT 498 | English Capstone Course   |
|         | (Prerequisites: completion of at least eight upper-division LIT |
|         | courses)  |

Choose any three additional upper-division Literature (LIT) courses from available offerings.

## and

Choose one of the following courses:

| ART 315 | Film as Art                  |
|---------|------------------------------|
|         | (Prerequisites: ENG 100/101) |
| ENG 350 | Fundamentals of Linguistics  |
|         | (Prerequisites: ENG 100/101) |
| ENG 352 | Origins of English           |
|         | (Prerequisites: ENG 100/101) |
| ENG 365 | Creative Writing             |
|         | (Prerequisites: ENG 100/101) |
| ENG 375 | Nature Writing               |
|         | (Prerequisites: ENG 100/101) |
|         |                              |

## **Upper-Division Electives**

(4 courses; 18 quarter units)

Students can use any upper-division courses in the College of Letters and Sciences to fulfill the upper-division elective requirement.

## Major in English with Single-Subject Matter Preparation

## (610-114)

Faculty Advisor: John Miller • (714) 429-5146 • jmiller@nu.edu

The major in English with Single Subject Matter Preparation is designed to prepare students for careers teaching middle or secondary school English or language arts. The program is approved by the California Commission on Teacher Credentialing: students who complete this program, including the required portfolio, will not be required to take the California Subject Examination for Teachers (CSET) in English to receive their teaching credential. To fulfill the Single Subject Matter Preparation standards mandated by the state of California, the program requires additional study in certain areas beyond what is required by the regular major in English. In order to receive the equivalency letter, students must also submit a portfolio of work produced in program courses; the requirements of the portfolio are covered in ENG 300.

## **Program Outcomes**

Upon successful completion of the Bachelor of Arts in English degree with Single Subject Matter Preparation, students should be able to:

- Demonstrate knowledge of major writers and their works and major periods of both British and American literature.
- Demonstrate the ability to analyze and interpret works of literature in a variety of genres both orally and in formal written work.
- Demonstrate understanding of major critical approaches to the interpretation of literature.
- Demonstrate the ability to analyze and interpret the use and effects of literary and rhetorical features of both literary and non-literary texts.
- Demonstrate the ability to situate and analyze literary works within historical and cultural contexts.
- Demonstrate understanding of various literary genres, their development and persistence over time, and the role of genre in the understanding and analysis of literary and non-literary texts.
- Through their writing demonstrate mastery of conventions of Standard English usage.

## **Degree Requirements**

To receive a Bachelor of Arts in English with Single-Subject Matter Preparation candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements.

## Preparation for the Major

(4 courses; 18 quarter units; all courses may also be used to fulfill General Education requirements)

| COM 200 | Effective Communication*                 |
|---------|--|
| ILR 260 | Information Literacy and Report Writing* |
|         | (Prerequisites: ENG 100/101)             |
| LIT 100 | Introduction to Literature*              |
|         | (Prerequisites: ENG 100/101)             |
| THR 200 | Theater Arts*                            |

\*May be used to satisfy general education requirements.

## **Requirements for the Major**

(15 courses; 67.5 quarter units)

| COM 360 | Representation and Diversity in Media  |
|---------|--|
|         | (Prerequisites: ENG 100/101)   |
| ENG 300 | Preprofessional Practicum ( <i>This course should be taken as early in the student's program as possible; it requires a</i> 31.5 |
|         | hour observation in the public schools.)   |
| ENG 350 | Fundamentals of Linguistics  |
|         | (Prerequisites: ENG 100/101)   |
| ENG 365 | Creative Writing   |
|         | (Prerequisites: ENG 100/101)   |
| LIT 311 | British Literature I   |
|         | (Prerequisite: LIT 100)  |
| LIT 312 | British Literature II  |
|         | (Prerequisite: LIT 100)  |
| LIT 321 | American Literature I  |
|         | (Prerequisite: LIT 100)  |
| LIT 322 | American Literature II   |
|         | (Prerequisite: LIT 100)  |
| LIT 338 | Shakespeare  |
|         | (Prerequisite: LIT 100)  |
| LIT 342 | World Literature   |
|         | (Prerequisite: LIT 100)  |
| LIT 360 | Literary Theory  |
|         | (Prerequisite: LIT 100)  |
| LIT 498 | English Capstone Course  |
|         | (Prerequisites: completion of at least eight upper-division LIT  |
|         | courses)   |
| and     |  |

and

Choose any three additional upper-division Literature (LIT) courses from available offerings.

## **Upper-Division Elective**

(1 course; 4.5 quarter units)

Students can use any upper-division course in the College of Letters and Sciences to fulfill the upper-division elective requirement.

## The Portfolio Requirement

In order to receive the Single Subject Matter Preparation equivalency letter, all students must submit a portfolio of work completed in program classes. (Note: the portfolio is not a graduation requirement.) The specific requirements of this portfolio are discussed in ENG 300. The portfolio itself is submitted upon completion of the program. Students who have completed required program coursework at other colleges or universities will need to submit work from those courses or eligible substitutions. Students or prospective students with questions about this requirement should contact the program Faculty Advisor.

## Major in English with a Preliminary Single Subject Credential (California)

(610-114-200)

Lead Faculty: For English B.A.: John Miller • (714) 429-5146 • jmiller@nu.edu For Credential: Mary Anne Weegar • (858) 642-8360 • mweegar@nu.edu

The Bachelor of Arts in English with a Preliminary Single Subject Credential provides a rigorous education that prepares candidates for a career as a teacher of English at the middle and secondary school levels. The program stresses literary analysis, diversity, and critical thinking and written and oral communication skills through a rigorous curriculum of literature, composition, language and linguistics, and communication studies. This program prepares candidates for professional work as single subject teachers in a changing cultural and economic environment. Candidates are required to complete all required coursework as well as the Basic Skills requirement and California Subject Examination for Teachers (CSET) to receive a credential.

## **Degree Requirements**

To receive a Bachelor of Arts in English with a Single Subject Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements.

## **Program Outcomes**

Upon successful completion of the Bachelor of Arts in English degree with Single Subject Teaching Credential, students should be able to:

- demonstrate knowledge of major writers and their works and major periods of both British and American literature;
- demonstrate the ability to analyze and interpret works of literature in a variety of genres both orally and in formal written work;
- demonstrate understanding of major critical approaches to the interpretation of literature;
- demonstrate the ability to analyze and interpret the use and effects of literary and rhetorical features of both literary and non-literary texts;
- demonstrate the ability to situate and analyze literary works within historical and cultural contexts;
- demonstrate understanding of various literary genres, their development and persistence over time, and the role of genre in the understanding and analysis of literary and non-literary texts;
- produce writing that demonstrates mastery of conventions of Standard Written English;
- demonstrate knowledge of fundamental concepts of linguistics;
- articulate the major stages of language development in children;
- demonstrate a deep and flexible understanding of subject matter;
- demonstrate familiarity with and the ability to apply technologies relevant to the study and teaching of English;
- demonstrate the ability to use and analyze a variety of communications media, including creative writing, journalism, electronic media, theater and mass media;
- demonstrate application of educational technology to meet the needs of all learners including those with special needs and linguistically and culturally diverse students;
- demonstrate knowledge of adolescent development in order to explain how to support growth in cognitive, social, physical and emotional domains;
- utilize different teaching strategies to accomplish educational goals;
- demonstrate a thorough understanding of the learning needs of students to create positive learning environments that ensure healthy human growth;
- demonstrate understanding through use of systematic observations, documentation, and other effective assessment strategies in a responsible manner to facilitate and account for learning and to support positive growth;
- design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas;
- consider students' knowledge when designing, implementing, and assessing curriculum to promote developmentally appropriate learning outcomes for all children;
- adhere to professional standards and ethics.

## Preparation for the Major

(5 courses; 19.5 quarter units)

| HIS 220A | History of the United States I (+)*                   |
|----------|---|
|          | (Prerequisites: ENG 100/101)                          |
| or       |   |
| POL 201  | American Government and Politics*                     |
|          | (Prerequisites: ENG 100/101)                          |
| LIT 100  | Introduction to Literature*                           |
|          | (Prerequisites: ENG 100/101)                          |
| HIS 350  | Cultural Diversity (+)*                               |
|          | (Prerequisites: ENG 100/101)                          |
| PSY 100  | Introduction to Psychology*                           |
| or       | , .,  |
| PSY 301  | Child Development*                                    |
|          | (Prerequisites: ENG 100/101)                          |
| TED 320  | Introduction to Teaching as a Profession (1.5 quarter |
|          | units; includes 30 hours of field experience)         |
|          | -   |

\*May be used to satisfy general education requirements.

Passage of the Basic Skills requirement and completion of TED 320 are required before taking any other TED courses required for the Major.

## **Requirements for the Blended Major**

(28 courses; 124.5 quarter units)

## **English Requirements**

(13 courses; 58.5 quarter units)

| ENG 350 | Fundamentals of Linguistics                                     |
|---------|---|
|         | (Prerequisites: ENG 100/101)                                    |
| ENG 365 | Creative Writing  |
|         | (Prerequisites: ENG 100/101)                                    |
| LIT 311 | British Literature I  |
|         | (Prerequisite: LIT 100)   |
| LIT 312 | British Literature II   |
|         | (Prerequisite: LIT 100)   |
| LIT 321 | American Literature I   |
|         | (Prerequisite: LIT 100)   |
| LIT 322 | American Literature II  |
|         | (Prerequisite: LIT 100)   |
| LIT 338 | Shakespeare   |
|         | (Prerequisite: LIT 100)   |
| LIT 342 | World Literature  |
|         | (Prerequisite: LIT 100)   |
| LIT 360 | Literary Theory   |
|         | (Prerequisite: LIT 100)   |
| LIT 498 | English Capstone Project  |
|         | (Prerequisites: completion of at least eight upper-division LIT |
|         | classes)  |

and

Choose three upper-division Literature (LIT) courses from available offerings.

## Education Theory and Methodology Requirements

(8 courses; 36 quarter units)

All Teacher Education (TED) coursework has a field experience component. Students must maintain a 3.0 GPA within all TED coursework. Grades of "D" or "F" are not acceptable.

| TED 300  | Fundamentals of Education                                  |
|----------|--|
|          | (Prerequisite: Admission to the Teacher Education program, |
|          | ENG 100/101, TED 320)                                      |
| TED 310  | Development and Learning                                   |
|          | (Prerequisite: Admission to the Teacher Education program, |
|          | ENG 100/101,TED 320)                                       |
| TED 330B | Reading and Language Arts Methods – Secondary              |

(Prerequisite: Admission to the Teacher Education program, ENG 100/101, TED 320, TED 300 and TED 310)

- TED 340 Reading in the Content Area (Prerequisite: Admission to the Teacher Education program, ENG 100/101, TED 320, TED 300 and TED 310)
   TED 410 Multicultural Literature
- (*Prerequisites: ENG 100/101, TED 320*) TED 420 Diversity in Teaching and Learning
  - (Prerequisites: ENG 100/101, TED 320)
- TED 430 Instructional Strategies for Students with Special Needs (*Prerequisites: ENG 100/101, TED 320*)
- TED 440 Classroom Leadership and Assessment Seminar (Prerequisites: ENG 100/101, TED 320)

## **Student Teaching Requirements**

(5 courses; 21 quarter units)

(Prerequisites: ALL MAJOR coursework must be completed satisfactorily including the GPA requirement for TED courses.)

Students must pass CSET prior to beginning student teaching. TED 470 and 465 A, B, C, and D are field experience courses receiving an Honors, Satisfactory or Unsatisfactory grade and are not factored into the cumulative GPA.

| TED 465A | Student Teaching I                                     |
|----------|--|
|          | Completion of all upper-division course requirements,  |
|          | including all TED coursework)                          |
| TED 465B | Student Teaching II                                    |
|          | Completion of all upper-division course requirements,  |
|          | including all TED coursework)                          |
| TED 465C | Student Teaching III                                   |
|          | Completion of all upper-division course requirements,  |
|          | including all TED coursework)                          |
| TED 465D | Student Teaching IV                                    |
|          | Completion of all upper-division course requirements,  |
|          | including all TED coursework)                          |
| TED 470  | Student Teaching Seminar and e-Portfolio Assessment (3 |
|          | quarter units)   |
|          | (Must be taken concurrently with TED 465 $A - D$ )     |
|          |  |

## Additional courses for satisfying SB 2042 and CTC for California Teaching Credential

(2 courses; 9 quarter units)

Students must have senior standing to enroll in these two classes. The following two courses are graduate level. The grades earned must be a "B" or better. These courses will not transfer to any graduate level program (at National University or elsewhere).

EDX 1201XComputer-based Technology in the ClassroomHEDX 1201XHealth Education for Teachers

## Major in General Studies

(610-443)

Faculty Advisor: Margaret J. Greer • (916) 855-4151 • mgreer@nu.edu

The Bachelor of Arts in General Studies (BAGS) is designed to meet the needs of a growing number of students who have completed considerable study in diverse subject areas, both academic and applied. This program allows students to organize their varied explorations into a coherent degree program. The BAGS is unique among academic curricula, for it liberates students from the burden of repeating coursework in order to fulfill traditional degree requirements. The degree allows students to explore a wide variety of disciplines. It integrates both applied study (e.g., business, nursing, computer science, military science) and arts and sciences to an extent not currently available in other degree programs. This is particularly important for adults who often interrupt their studies for prolonged periods and return with a different academic focus and

career goal. The general studies degree allows nontraditional learners to continue moving forward without retracing a considerable portion of their study.

## **Program Outcomes**

Upon completion of the Bachelor of Arts in General Studies degree, students will be able to:

- Demonstrate the competencies essential to the independent research on scholarly topics across a range of disciplines.
- Demonstrate competency with parenthetical citations within texts and with references or Works cited pages.
- Demonstrate understanding of their cumulative growth with research and writing over the course of their postsecondary education.
- Demonstrate consistent proficiency with the mechanics of academic writing.
- Explain and interpret the role of education in their occupational choices.

#### **Degree Requirements**

To receive a Bachelor of Arts in General Studies degree, students must complete at least 180 quarter units as articulated below, 90 of which must be completed in the Arts and Sciences, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level. In the absence of transfer credit additional general electives may be needed to fulfill unit requirements for the degree.

In addition to the above general education requirements, two concentrations are required. A concentration for the General Studies degree program is defined as 22.5 quarter units in a given discipline. A General Studies concentration differs from a major in the reduced number of credits that are required. The first concentration requirement is fulfilled by acquiring 22.5 quarter units in an Arts and Sciences discipline such as natural sciences, mathematics, literature, history, or social science, and nine of the quarter units must be completed at the upper-division level. For example: If a student was pursuing a literature concentration, they would need five courses with a Literature prefix. The second concentration requirement is fulfilled by completing 22.5 quarter units in either a single Applied Studies or Arts and Science discipline, with at least nine of the quarter units completed at the upper-division level. If a student selects the second concentration in the Applied Studies discipline, such as management, law, accounting, or marketing, all five courses must have the same prefix such as MGT if the management discipline was selected. However students do have the option of selecting a second concentration in Arts and Sciences rather than Applied Studies. If a second concentration in Arts and Sciences is selected, then students have the option of choosing five courses from various disciplines within the Arts and Sciences area. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

#### **Concentration Requirement**

(10 courses; 45 quarter units)

Each student in the BAGS program is required to complete two concentration requirements of 22.5 units each. Each of the concentration requirements must include at least nine-quarter units of upper-division work. Students can choose from a variety of subject areas to satisfy the Arts and Sciences concentration requirements. These courses could be used alone or in combination with courses taken at other institutions. Listed below are examples of subject areas that can be used to fulfill a concentration requirement:

### Arts and Sciences

(5 courses; 22.5 quarter units)

Literature Environmental Studies Fine and Performing Arts History Social Sciences Communications

#### **Applied Study**

(5 courses; 22.5 quarter units)

Students can also use courses from the listed areas to satisfy the concentration requirement in Applied Study. These courses could be used on their own or in combination with related courses at other institutions.

Law Management Accounting Information Technology Management Criminal Justice Administration Marketing Human Resource Management Public Administration

#### Portfolio Requirement: BGS 499

(1 course; 4.5 quarter units)

In addition to the above coursework, students must complete a final portfolio project under the supervision of a faculty member. During this portfolio project, students map out the mosaic of their academic accomplishments and find the internal coherence of their intellectual explorations. To fulfill the portfolio requirement, students need to save and maintain a file of all papers for their classes, which will be revised and included in the portfolio.

#### **Upper-Division Electives**

(5 courses; 22.5 quarter units)

To fulfill their unit requirements, students can choose electives from any 300-, 400-, or 500-level courses for which they meet prerequisites.

## Major in Global Studies<sup>®</sup>

#### (610-107)

Faculty Advisor: Daniel Thorburn • (209) 475-1443 • dthorbur@nu.edu

Offered only online, the Bachelor of Arts in Global Studies degree program provides a flexible integration of skills and competencies that prepares students for a variety of international careers as well as graduate studies in business, technology, education, social science, government, media and law. In short, the program provides students with the ability to think and act "globally."

The global environment in which economics, culture and technology converge is diverse, changing, complex and interdependent. By combining a variety of disciplines, this program provides a framework in which to understand and effectively negotiate global realities, whether they are economic, political, cultural, or ecological. The program encourages students to apply cultural understanding and explore and develop potential markets for their ideas and talent. Students in this program learn to use global communications and information technologies to conduct research in a variety of electronic databases. Global Studies majors become knowledgeable in the cultures and practices of the world's communities. Graduates understand the roles that ecology, gender, race, class, religion, and ethnicity play in cultural environments and apply their understanding to everyday interactions among diverse cultures.

Graduates also produce a portfolio that enables them to integrate the skills they have acquired and apply them to the solution of a real-world problem. This portfolio, which graduates post on a website of their own design, includes individual projects and a final, full-length project.

## Program Outcomes

Upon completion of the global studies program, students will be able to:

- Take the world as a major point of reference ("think globally").
- Know how to frame an appropriate online research project.
- Evaluate online information for its reliability and veracity.
- Analyze and synthesize current research about selected global issues.
- Develop the knowledge and skills necessary to begin participating actively in solving important global issues and problems ("act globally").
- Use global communications and information technologies and search engines effectively to conduct online research.
- Construct a sound argument in favor of a proposed solution to a real-world problem using theoretical constructs and empirical evidence.
- Clarify explicit linkages between culture, technology, and economics on global and regional scales.
- View a problem or situation from several disciplinary perspectives.
- Exercise cross-cultural awareness (awareness and comparison of the past and present diversity of ideas and practices to be found in human societies around the world).
- Explain the dynamics of global interactions and how they have changed over time.
- Analyze the roles that ecology, gender, race, class, religion, and ethnicity play in a variety of cultural environments and apply their understanding to everyday interactions among diverse cultures.

## **Degree Requirements**

To obtain a Bachelor of Arts in Global Studies, students must complete at least 180 quarter units as listed below, 45 of which must be completed through National University and 76.5 of which must be completed at the upper-division level. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

If the foreign language requirement is not completed in General Education, the equivalent must be completed as preparation for the Global Studies major either by testing or by satisfactorily passing two courses in one of the following languages: Arabic, Chinese, French, German, Japanese, Portuguese, Russian, or Spanish. Other languages are acceptable upon approval of the director of the program. If a student opts to take the elective course GLS 440, Study Abroad, additional fees, waivers, passports, visas, immunizations and other requirements may need to be fulfilled depending on the destination. It is the student's responsibility to find out about these additional requirements and to meet them.

## Preparation for the Major

(1 course; 4.5 quarter units)

- HIS 234 World Civilizations II \* (Prerequisites: ENG 100/101)
- \* May be used to satisfy a general education requirement.

## **Requirements for the Major**

(10 courses; 45 quarter units)

| COM 385 | Tale, Text and Hypertext                              |
|---------|---|
|         | (Prerequisites: ENG 100/101)                          |
| GLS 410 | Gender Identity in a Global Context                   |
|         | (Prerequisite: ENG 240)                               |
| GLS 420 | Ecological Revolutions: Economics, Technology and the |
|         | Global Environment                                    |
|         | (Prerequisite: ENG 240)                               |
| GLS 430 | The Global Economy                                    |
|         | (Prerequisite: ENG 240)                               |
| HIS 320 | Culture, Capitalism and Technology in Modern World    |
|         | History   |
|         | (Prerequisites: ENG 100/101)                          |
| LIT 342 | World Literature                                      |
|         | (Prerequisites: LIT 100)                              |
| PHL 320 | Comparative Religion                                  |
|         | (Prerequisites: ENG 100/101)                          |
| SCI 300 | Geography: Mapping the World                          |
| SOC 328 | Intercultural Thinking and Creativity                 |
|         | (Prerequisites: ENG 100/101)                          |
| GLS 450 | Global Studies Seminar and Final Project              |
|         | (To be taken as final course in the major)            |
|         | (22 22  |

Portfolio requirement for GLS 450: Students must complete a final portfolio project under the supervision of a faculty member. Students need to keep all graded work from all previous courses for possible inclusion in the portfolio.

## **Upper-Division Electives**

(6 courses; 27 quarter units)

To fulfill upper-division unit requirement, students may select from the courses listed below:

| ART 329 | World Art   |
|---------|---|
|         | (Prerequisites: ENG 100/101)                          |
| GLS 310 | Global Communications and Information Technology      |
|         | (Prerequisite: ENG 240)                               |
| GLS 330 | Film in an International Context                      |
|         | (Prerequisite: ENG 240)                               |
| GLS 440 | Study Abroad  |
|         | (Prerequisite: HIS 320)                               |
| HIS 325 | Peoples and Places: Migration in Modern World History |
|         | (Prerequisites: ENG 100/101)                          |
| HIS 434 | The Modern World, 1500 to the Present                 |
|         | (Prerequisites: ENG 100/101 and HIS 234)              |
| HUM 501 | Civic Culture and Global Awareness                    |
|         | (Prerequisites: ENG 100/101)                          |
| LIT 345 | Mythology   |
|         | (Prerequisite: LIT 100)                               |
| MUS 327 | World Music   |
|         | (Prerequisites: ENG 100/101)                          |
| PHL 375 | Environmental Ethics                                  |
|         | (Prerequisites: ENG 100/101)                          |
| POL 320 | Politics of Social Movements                          |
|         | (Prerequisites: ENG 100/101)                          |
| SCI 335 | Environmental Science                                 |
|         |   |
|         |   |

## ◆ Major in History ℃

## (610-117)

Faculty Advisor: Doug Slawson • (858) 642-8390 • dslawson@nu.edu

The Bachelor of Arts in History is a broad-based program that has specific goals including: (1) engaging the mind and imagination of those who study history; (2) introducing students to worlds, times, places, and cultures – including their own – in ways they have never before considered; and (3) promoting the acquisition of historical

knowledge and critical thinking, reading, writing, and research skills. Upon successful completion of the undergraduate history major, students should be able to demonstrate competency in the vital skills of historical explanation, discernment, and synthesis.

The study of the past broadens our perspective and allows us to discover the essential elements of human existence. The term historian covers a broad range of career options and job settings. In general, historians study, assess, and interpret the past to determine what happened and why. They examine court documents, diaries, letters, and newspaper accounts; they conduct research, write, teach, evaluate, and make recommendations. They interview individuals and study artifacts and archeological evidence.

In addition to providing experience in logical argumentation, history courses offer research, writing, and analytical skills necessary for many fulfilling careers. Graduates with a degree in history often become educators themselves and teach in elementary schools, secondary schools, or in postsecondary institutions. Beyond teaching, historians also work as researchers in museums and local historical organizations that deal with cultural resources management and historic preservation and make valuable contributions to government and private think tanks. A history degree is excellent preparation for journalists, ad writers, editors and anyone interested in producing multimedia materials and documentaries. Historians have rewarding careers as information managers such as archivists, records managers, and librarians. Finally, training in history creates a strong intellectual foundation for people interested in advocacy such as lawyers and paralegals, litigation support, legislative staff work, and nonprofit foundations. Positions that attract history majors will likely require some of the following qualifications beyond the Bachelor of Arts in History: experience, extensive knowledge of a particular time period or region, and specialized writing and research skills.

## **Program Outcomes**

Upon completing the Bachelor of Arts in History, graduates will be able to:

- Demonstrate the competencies essential to the independent and collaborative practice of historical thinking skills applied in the profession.
- Analyze the similarities and differences between distinct social formations around the world from ca. 10,000 BCE to the present.
- Clarify how events in history are related to one another in time and space.
- Integrate knowledge of history with educational strategies in preparation for teaching history at the middle- and high-school levels.
- Analyze the roles that ecology, gender, race, class, religion, and ethnicity play in a variety of historical eras and places.
- Explain that the study of history involves interpretation of the past based on current concerns and theories and see how understandings of the past changes as new information and new interpretation of old information arise.
- Demonstrate proficiency in the utilization of research, including the evaluation of previous historical research as well as the development and implementation of appropriate research strategies in the field of historical studies.

## **Degree Requirements**

To receive a Bachelor of Arts with a Major in History, students must complete at 180 quarter units as listed below, 45 of which must be completed in residence at National University, and 76.5 of which must be completed at the upper-division level. The following courses are degree requirements. In absence of transfer credit, additional general electives may be necessary to satisfy the total units required for the degree. Students should refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

If the foreign language requirement is not completed in General Education, the equivalent must be completed as preparation for the History major either by testing or by satisfactorily passing two courses in one of the following languages: Arabic, Chinese, French, German, Japanese, Portuguese, Russian, or Spanish. Other languages are acceptable upon approval of the director of the program.

## Preparation for the Major

(5 courses; 22.5 quarter units)

| ENG 240  | Advanced Composition *                |
|----------|---------------------------------------|
|          | (Prerequisites: ENG 100/101)          |
| HIS 220A | History of the United States I * (+)  |
|          | (Prerequisites: ENG 100/101)          |
| HIS 220B | History of the United States II * (+) |
|          | (Prerequisites: ENG 100/101)          |
| HIS 233  | World Civilizations I *               |
|          | (Prerequisites: ENG 100/101)          |
| HIS 234  | World Civilizations II *              |
|          | (Prerequisites: ENG 100/101)          |

\* May be used to satisfy general education requirements.

## **Required for the Major**

(10 courses; 45 quarter units)

| HIS 431 | The Ancient World  |
|---------|--|
|         | (Prerequisites: ENG 100/101 and HIS 233)                       |
| HIS 432 | The Classical World  |
|         | (Prerequisites: ENG 100/101 and HIS 233)                       |
| HIS 433 | The Post-Classical World                                       |
|         | (Prerequisites: ENG 100/101 and HIS 233)                       |
| HIS 434 | The Modern World, 1500 to the Present                          |
|         | (Prerequisites: ENG 100/101 and HIS 234)                       |
| HIS 400 | History and Historians: Theories and Methods                   |
|         | (Prerequisite: ENG 240)  |
| HIS 360 | The American Colonial Experience, 1584-1783                    |
|         | (Prerequisites: ENG 100/101 and HIS 220A)                      |
| HIS 361 | The Making and Sundering of the United States, 1783-           |
|         | 1865   |
|         | (Prerequisites: ENG 100/101 and HIS 220A)                      |
| HIS 362 | The United States between Wars, 1865-1917                      |
|         | (Prerequisites: ENG 100/101 and HIS 220B)                      |
| HIS 363 | The United States since World War I                            |
|         | (Prerequisites: ENG 100/101 and HIS 220B)                      |
| HIS 499 | Capstone Research Project                                      |
|         | (Prerequisites: ENG 240 or equivalent, HIS 400, and            |
|         | completion of 31.5 quarter units of core courses in the major) |
|         |  |

## Electives

(6 courses; 27 quarter units)

Students must complete a minimum of 27 quarter units of electives to fulfill the upper-division unit requirements to earn the Bachelor of Arts in History. Students can select from the following strongly recommended and recommended electives OR choose from any upper-division course in the College of Letters and Sciences. Three elective courses must be in the History program (HIS). To ensure adequate preparation for the California State Examination for Teachers (CSET), students who wish to become middle-school and high-school history teachers in California should take all of their electives from the strongly recommended list.

## Strongly Recommended

HIS 320 Culture, Capitalism, and Technology in Modern World History (Prerequisites: ENG 100/101) Letters and Sciences

| HIS 350 | Cultural Diversity (+)        |
|---------|-------------------------------|
|         | (Prerequisites: ENG 100/101)  |
| HIS 410 | The California Experience     |
|         | (Prerequisites: ENG 100/101)  |
| PHL 320 | Comparative Religion          |
|         | (Prerequisites: ENG 100/101)  |
| POL 540 | The American Political System |
| SCI 300 | Geography: Mapping the World  |

## Recommended

| GLS 410   | Gender Identity in a Global Context                          |
|-----------|--|
| GLS 420   | (Prerequisite: ENG 240)<br>Ecological Revolutions            |
|           | (Prerequisite: ENG 240)                                      |
| GLS 430   | The Global Economy   |
|           | (Prerequisite: ENG 240)                                      |
| HIS 300   | Foundations of Western Civilization                          |
|           | (Prerequisites: ENG 100/101)                                 |
| HIS 325   | Peoples and Places: Migration in Modern World History        |
|           | (Prerequisites: ENG 100/101)                                 |
| HIS 339   | History of the Middle East 600-1600                          |
|           | (Prerequisites: ENG 100/101)                                 |
| HIS 341   | History through Theater                                      |
|           | (Prerequisites: ENG 100/101)                                 |
| HIS 342   | Modern History of the Middle East                            |
|           | (Prerequisites: ENG 100/101)                                 |
| HIS 345   | History and Cultures of Latin America                        |
|           | (Prerequisites: ENG 100/101)                                 |
| HIS 346   | Chinese History and Culture I                                |
| 1110 0 10 | (Prerequisites: ENG 100/101)                                 |
| HIS 348   | History and Cultures of Asia                                 |
| 1110 0 10 | (Prerequisites: ENG 100/101)                                 |
| HIS 349   | History and Cultures of Africa                               |
| 1110.055  | (Prerequisites: ENG 100/101)                                 |
| HIS 355   | Chinese History and Culture II                               |
|           | (Prerequisites: ENG 100/101)                                 |
| HIS 370   | History and Cultures of the American Southwest               |
| HIS 490   | (Prerequisites: ENG 100/101)                                 |
| SOC 325   | Guided Study   |
| 50C 525   | Contemporary Popular Culture<br>(Prerequisites: ENG 100/101) |
| SOC 328   | Intercultural Thinking and Creativity                        |
| JUC 520   | (Prerequisites: ENG 100/101)                                 |
| SOC 336   | American Film and Society                                    |
| 550 550   | (Prerequisites: ENG 100/101)                                 |
|           | (1 / C/ C/ MOREO, E140 100/101)                              |

Major in Interdisciplinary Studies

(610-102)

Faculty Advisor: Jacqueline Caesar • (858) 642-8350 • jcaesar@nu.edu

The Bachelor of Arts in Interdisciplinary Studies (BAIS) provides a broad, rigorous education that introduces students to essential knowledge, and connections across the disciplines and application of knowledge to life beyond the University. This degree gives students an enriched and provocative curriculum that prepares them for professional work in a changing cultural and economic environment.

## Program Outcomes

Upon completion of the Bachelor of Arts in Interdisciplinary Studies, students will be able to:

- Custom design a course of study that enables them to pursue professional goals and objectives and personal interests.
- Demonstrate an understanding of interdisciplinary theory and the practice of critical thinking for the collection, validation, analysis and synthesis of historical data and new information.
- Explain the integration of knowledge in a global context and

engage in collaborative research across disciplines.

- Identify and appreciate the cultural perspectives of world views.
- Use information communications technology for knowledge sharing and the interdisciplinary approach for resource development, problem solving, and creative community building.

#### **Degree Requirements**

To receive a Bachelor of Arts degree with a major in interdisciplinary studies, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level. The following courses are specific degree requirements. If students intend to complete a teacher credentialing program, these courses will help prepare for the MSAT and Basic Skills requirement tests. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

## Preparation for the Major

(3 courses; 13.5 quarter units)

| ENG 365  | Creative Writing*<br>(Prerequisites: ENG 100/101) |
|----------|---|
| or       |   |
| ENG 350  | Fundamentals of Linguistics                       |
|          | (Prerequisites: ENG 100/101)                      |
| HIS 220A | History of the United States I (+)*               |
|          | (Prerequisites: ENG 100/101)                      |
| or       |   |
| HIS 220B | History of the United States II (+)*              |
|          | (Prerequisites: ENG 100/101)                      |
| LIT 100  | Introduction to Literature*                       |
|          | (Prerequisites: ENG 100/101)                      |

\*May be used to satisfy general education requirements.

#### **Requirements for the Major**

(13 courses; 58.5 quarter units)

| COM 380 | Democracy in the Information Age  |
|---------|---|
| SOC 336 | (Prerequisites: ENG 100/101)<br>American Film and Society<br>(Prerequisites: ENG 100/101) |
| or      |   |
| HIS 350 | Cultural Diversity  |
|         | (Prerequisites: ENG 100/101)  |
| BIS 301 | Introduction to Interdisciplinary Studies   |
| BIS 401 | Interdisciplinary Practice: Integrating Knowledge with                                    |
|         | Technology  |
|         | (Prerequisite: BIS 301 and four additional courses from the                               |
|         | major)  |
|         |   |

4.5 quarter units in literature (LIT) are required. The following are recommended:

| LIT 321 | American Literature I   |
|---------|-------------------------|
|         | (Prerequisite: LIT 100) |
| LIT 322 | American Literature II  |
|         | (Prerequisite: LIT 100) |
| LIT 338 | Shakespeare             |
|         | (Prerequisite:LIT 100)  |
| LIT 342 | World Literature        |
|         | (Prerequisite: LIT 100) |
| LIT 345 | Mythology               |
|         | (Prerequisite: LIT 100) |

| LIT 446 | Studies in Poetry       |
|---------|-------------------------|
|         | (Prerequisite:LIT 100)  |
| LIT 450 | Studies in the Novel    |
|         | (Prerequisite: LIT 100) |
| LIT 460 | Gender and Literature   |
|         | (Prerequisite: LIT 100) |

4.5 quarter units in social sciences (HIS, POL, SOC) are required. The following are recommended:

| HIS 320 | Culture, Capitalism and Technology in Modern World<br>History |
|---------|---|
|         | (Prerequisites: ENG 100/101)                                  |
| HIS 341 | History Through Theater                                       |
|         | (Prerequisites: ENG 100/101)                                  |
| HIS 410 | The California Experience                                     |
|         | (Prerequisites: ENG 100/101)                                  |
| SOC 325 | Contemporary Popular Culture                                  |
|         | (Prerequisites: ENG 100/101)                                  |
| SOC 344 | Marriage, Sex and the Family                                  |
|         | (Prerequisites: ENG 100/101)                                  |
| SOC 430 | Culture, Technology and Society                               |
|         | (Prerequisites: ENG 100/101)                                  |
| SOC 445 | Contemporary Social Problems                                  |
|         | (Prerequisites: ENG 100/101)                                  |
| SOC 540 | Power and Social Change                                       |
|         | (Prerequisites: ENG 100/101)                                  |

4.5 quarter units in behavioral sciences (HUB, PSY) are required. The following are recommended:

| HUB 420 | Human Communication                      |
|---------|--|
|         | (Prerequisites: ENG 100/101 and PSY 100) |
| HUB 440 | Organizational Development               |
|         | (Prerequisites: ENG 100/101 and PSY 100) |
| PSY 426 | History of Psychology                    |
|         | (Prerequisites: ENG 100/101 and PSY 100) |
| PSY 427 | Biological Psychology                    |
|         | (Prerequisites: ENG 100/101 and PSY 100) |
| PSY 428 | Developmental Psychology                 |
|         | (Prerequisites: ENG 100/101 and PSY 100) |
| PSY 429 | Introduction to Personality Theory       |
|         | (Prerequisites: ENG 100/101 and PSY 100) |
| PSY 432 | Social Psychology                        |
|         | (Prerequisites: ENG 100/101 and PSY 100) |
| PSY 433 | Cognitive Psychology                     |
|         | (Prerequisites: ENG 100/101 and PSY 100) |

Students should choose no fewer than 4.5 quarter units in natural science and 4.5 quarter units in mathematics. A third 4.5 quarter unit course (either SCI or MTH) must also be selected. Some of the mathematics courses may have more than one prerequisite. The following are recommended:

| SCI 300 | Geography: Mapping the World                                   |
|---------|--|
| SCI 330 | Ecology  |
| SCI 411 | Biodiversity   |
|         | (Recommended: Prior completion of SCI 100/100A, or equivalent) |
| SCI 450 | Natural History of California: A Field Course                  |
| MTH 301 | Structure and Concepts of Mathematical Fundamentals            |
|         | II   |
|         | (Prerequisite: MTH 209A)                                       |
| MTH 317 | Mathematical Modeling  |
|         | (Prerequisites: MTH 215 or MTH 216A/B and MTH 210)             |
| MTH 410 | Computer Technology in the Mathematics Classroom               |
|         | (Prerequisite: MTH 215 or MTH 216A/B or MTH 301)               |
| MTH 411 | Number Theory  |
|         | (Prerequisite: MTH 215 or MTH 216A/B or MTH 301or              |

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(Prerequisite: MTH 215 or MTH 216A/B or MTH 301or placement evaluation)
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| MTH 412 | History of Mathematics                               |
|---------|--|
|         | (Prerequisite: MTH 215 or MTH 216A/B or MTH 301)     |
| MTH 417 | Foundations of Geometry                              |
|         | (Prerequisites: MTH 2215 or MTH 216A/B, and MTH 311) |
| MTH 418 | Statistical Analysis                                 |
|         | (Prerequisites: MTH 210 and MTH 220)                 |
|         |  |

Nine quarter units from the humanities complex (ART, HIS, HUM, MUS, PHL, SOC, THR, GLS) are required. The following are recommended:

| 1 DT 04 5       |  |  |  |
|-----------------|--|--|--|
| ART 315         | Film as Art  |  |  |
|                 | (Prerequisites: ENG 100/101)                         |  |  |
| ART 323         | Modern Art   |  |  |
|                 | (Prerequisites: ENG 100/101)                         |  |  |
| ART 329         | World Art  |  |  |
|                 | (Prerequisites: ENG 100/101)                         |  |  |
| GLS 410         | Gender Studies: Gender Identity in a Global Context  |  |  |
|                 | (Prerequisites: ENG 240)                             |  |  |
| HIS 345         | History and Cultures of Latin America                |  |  |
|                 | (Prerequisites: ENG 100/101)                         |  |  |
| HIS 348         | History and Cultures of Asia                         |  |  |
|                 | (Prerequisites: ENG 100/101)                         |  |  |
| HIS 349         | History and Cultures of Africa                       |  |  |
|                 | (Prerequisites: ENG 100/101)                         |  |  |
| HIS 370         | History and Cultures of the American Southwest       |  |  |
|                 | (Prerequisites: ENG 100/101)                         |  |  |
| MUS 326         | Survey of American Music History                     |  |  |
| MUS 327         | World Music  |  |  |
|                 | (Prerequisites: ENG 100/101)                         |  |  |
| PHL 320         | Comparative Religion                                 |  |  |
|                 | (Prerequisites: ENG 100/101)                         |  |  |
| PHL 339         | Study of a Major Philosopher                         |  |  |
|                 | (Prerequisites: ENG 100/101)                         |  |  |
| PHL 375         | Environmental Ethics                                 |  |  |
|                 | (Prerequisites: ENG 100/101)                         |  |  |
| PHL 437         | Ethics   |  |  |
|                 | (Prerequisites: ENG 100/101)                         |  |  |
| SOC 328         | Intercultural Thinking and Creativity                |  |  |
|                 | (Prerequisites: ENG 100/101)                         |  |  |
| SOC 500         | Understanding Cultural Pluralism in American Society |  |  |
|                 | (Prerequisites: ENG 100/101)                         |  |  |
| Capstone course |  |  |  |
|                 |  |  |  |

BIS 499 Interdisciplinary Studies Project

## **Upper-Division Electives**

(2 courses; 9 quarter units)

Students can select any 300-, 400-, or 500-level courses in arts and sciences to complete the total of 76.5 upper-division units for the degree.

## Major in Interdisciplinary Studies with a California Preliminary Multiple Subjects Teaching Credential

610-102-203

Lead Faculty: Mary Anne Weegar • (858) 642-8360 • mweegar@nu.edu Jacqueline Caesar • (858) 642 8350 • jcaesar@nu.edu

The Bachelor of Arts in Interdisciplinary Studies and a Preliminary Multiple Subjects Teaching Credential (California) provides a broad, rigorous education that prepares candidates for a career as a teacher at the elementary level. The program introduces candidates to essential knowledge, connections across the disciplines, and applies knowledge of life beyond the University. This degree program gives candidates an enriched and thought-provoking curriculum that incorporates content across subject areas and with specific

educational methodology courses. This program prepares candidates for professional work as multiple subject teachers in a changing cultural and economic environment.

## **Program Outcomes**

Upon completion of the Bachelor of Arts in Interdisciplinary Studies with a Preliminary Multiple Subjects Teaching Credential, candidates will be able to:

- demonstrate an understanding of interdisciplinary theory and the practice of critical thinking for the collection, validation, analysis, and synthesis of historical data and new information;
- explain the integration of knowledge in a global context and engage in collaborative research across disciplines;
- identify and appreciate the cultural perspectives of world views;
- use information communications technology for knowledge sharing and the interdisciplinary approach;
- · demonstrate a deep and flexible understanding of subject matter
- demonstrate application of educational technology to meet the needs of all learners including those with special needs and linguistically and culturally diverse students;
- demonstrate knowledge of child and adolescent development in order to explain how to support growth in cognitive, social, physical, and emotional domains;
- utilize different teaching strategies to accomplish the teaching and learning goals;
- demonstrate a thorough understanding of the learning needs and developmental issues of students to create positive learning environments that ensures healthy human growth;
- demonstrate understanding through use of systematic observations, documentation, and other effective assessment strategies in a responsible manner to facilitate and account for learning, and to support positive growth;
- design, implement and evaluate standards-based lesson plans for learning and achievement in content areas;
- consider students' knowledge when designing, implementing, and assessing curriculum to promote developmentally appropriate learning outcomes for all children;
- adhere to professional standards and ethics.

## **Degree Requirements**

To receive a Bachelor of Arts in Interdisciplinary Studies with a Multiple Subjects Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Candidates must demonstrate subject-matter competency through a state-approved examination. This major is designed to help prepare candidates for the CSET examinations. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

## I. GENERAL EDUCATION COURSES

(70.5 quarter units) The General Education requirements are listed below

## AREA A: ENGLISH COMMUNICATION

(15 quarter units required)

## CATEGORY I – Writing

(10.5 quarter units required)

| ENG 100 | Effective College English I (3 quarter units)  |
|---------|--|
|         | (Prerequisite: Placement Exam)                 |
| ENG 101 | Effective College English II (3 quarter units) |
|         | (Prerequisite: ENG 100)                        |

ENG 240 Advanced Composition (Prerequisites: ENG 100/101)

## **CATEGORY 2 – Speech and Communication** (4.5 quarter units required)

COM 100 Introduction to Communications

## **AREA B: MATHEMATICAL CONCEPTS QUANTITATIVE REASONING** (4.5 quarter units required)

MTH 209A Structures and Concepts of Mathematical Fundamentals I (Prerequisite: Placement evaluation)

## **AREA C: INFORMATION LITERACY AND TECHNOLOGY** (4.5 quarter units required)

ILR 260 Information Literacy and Report Writing (*Prerequisites: ENG 100/101*)

### AREA D: ARTS AND HUMANITIES

(13.5 quarter units required)

| HIS 233 | World Civilizations I<br>( <i>Prerequisites: ENG 100/101</i> ) |
|---------|--|
| or      |  |
| HIS 234 | World Civilizations II   |
|         | (Prerequisites: ENG 100/101)                                   |
| ART 100 | Introduction to Art History                                    |
|         | (Prerequisites: ENG 100/101)                                   |
| MUS 100 | Fundamentals of Music  |
|         |  |

## AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(13.5 quarter units required)

| HIS 220A | History of the United States I (includes study of the |
|----------|---|
|          | Constitution) (+)                                     |
|          | (Prerequisites: ENG 100/101)                          |
| PSY 301  | Child Development                                     |
|          | (Prerequisites: ENG 100/101)                          |
|          |   |

Choose one course from a social or behavioral science area. (See General Education section of the Catalog for course offerings in these areas.)

## AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(10.5 quarter units required with one lab) (Note: One science lab is required at 1.5 quarter units.)

| The foll | lowing | are | recommended: |  |
|----------|--------|-----|--------------|--|
|          |        |     |              |  |

- SCI 100 Survey of Bioscience
- SCI 100A Survey of Bioscience Laboratory (1.5 quarter units) (Prerequisite: SCI 100)
- SCI 102 Survey of Physical Science

## AREA G: MODERN LANGUAGE

(9 quarter units required)

See the General Education Requirements for Modern Language requirement

## II. Preparation for the Major

(3 courses; 10.5 quarter units required)

| LIT 100 | Introduction to Literature                            |
|---------|---|
|         | (Prerequisites: ENG 100/101)                          |
| HIS 410 | The California Experience                             |
|         | (Prerequisites: ENG 100/101)                          |
| TED 320 | Introduction to Teaching As A Profession (includes 30 |
|         | hours of field experience) (1.5 quarter units)        |

Passage of Basic Skills requirement and completion of TED 320 is required before taking any other TED courses required for the Blended Major.

## **III. REQUIREMENTS FOR THE BLENDED MAJOR**

(24 courses; 106.5 quarter units)

All Teacher Education courses (TED) have a field experience component. Students must maintain a 3.0 GPA within all TED coursework and grades of "D" or "F" are not acceptable. All major coursework must be completed and the CSET passed prior to student teaching.

#### Interdisciplinary Blended Major Requirements

(19 courses; 85.5 quarter units)

| BIS 301                        | Introduction to Interdisciplinary Studies                           |  |
|--------------------------------|---|--|
| COM 380                        | Democracy in the Information Age                                    |  |
|                                | (Prerequisites: ENG 100/101)  |  |
| HIS 350                        | Cultural Diversity  |  |
|                                | (Prerequisites: ENG 100/101)  |  |
| ENG 350                        | Fundamentals of Linguistics   |  |
|                                | (Prerequisites: ENG 100/101)  |  |
| MTH 301                        | Structure and Concepts of Mathematical Fundamentals                 |  |
|                                | II  |  |
|                                | (Prerequisite: MTH 209A)  |  |
| BIS 401                        | Interdisciplinary Practice: Integrating Knowledge with              |  |
| DIO 401                        | Technology  |  |
|                                | ( <i>Prerequisite: BIS 301 and four additional courses from the</i> |  |
|                                | ,                             |  |
| <b>TED 200</b>                 | major)  |  |
| TED 300                        | Fundamentals of Education   |  |
|                                | (Prerequisite: Admission to the Teacher Education program,          |  |
|                                | ENG 100/101, TED 320)   |  |
| TED 310                        | Development and Learning  |  |
|                                | (Prerequisite: Admission to the Teacher Education program,          |  |
|                                | ENG 100/101, TED 320)   |  |
| TED 330A                       | Reading and Language Arts Methods Elementary                        |  |
|                                | (Prerequisite: Admission to the Teacher Education program,          |  |
|                                | ENG 100/101,TED 320, TED 300 and TED 310)                           |  |
| TED 340                        | Reading in the Content Area   |  |
|                                | (Prerequisite: Admission to the Teacher Education                   |  |
|                                | program,ENG 100/101, TED 320, TED 300 and TED 310)                  |  |
| TED 350                        | Math and Science Methods  |  |
|                                | (Prerequisites: ENG 100/101, TED 320)                               |  |
| TED 355                        | History and Social Science Methods                                  |  |
|                                | (Prerequisite: Admission to the Teacher Education                   |  |
|                                | program,ENG 100/101, TED 320, TED 300 and TED 310                   |  |
| TED 380                        | Visual /Performing Arts and Physical Education                      |  |
| 12D 000                        | Methods   |  |
|                                | (Prerequisite: Admission to the Teacher Education program,          |  |
|                                | ENG 100/101, TED 320, TED 300 and TED 310)                          |  |
| TED 410                        | Multicultural Literature  |  |
| 1ED 410                        |   |  |
| TED 420                        | (Prerequisites: ENG 100/101, TED 320)                               |  |
| TED 430                        | Instructional Strategies for Students with Special Needs            |  |
| TED 440                        | (Prerequisites: ENG 100/101, TED 320)                               |  |
| TED 440                        | Classroom Leadership and Assessment Seminar                         |  |
|                                | (Prerequisite: Admission to the Teacher Education program,          |  |
|                                | ENG 100/101, TED 320)   |  |
|                                |   |  |
|                                | e from the following:   |  |
| ART 329                        | World Art   |  |
|                                | (Prerequisites: ENG 100/101)  |  |
| MUS 327                        | World Music   |  |
|                                | (Prerequisites: ENG 100/101)  |  |
| ART 400                        | Expressive and Integrated Arts                                      |  |
|                                |   |  |
| Choose one from the following: |   |  |
| SCI 300                        | Geography: Mapping the World  |  |

| SCI 500 | Geography. Mapping the world |
|---------|------------------------------|
| SCI 301 | Earth and Planetary Science  |

SCI 330 Ecology

SCI 335 Environment Science SCI 411 Biodiversity

| CI 411 | Biodiversity  |
|--------|---|
|        | (Recommended: prior completion of SCI 100 and 100A, |
|        | or equivalent)                                      |
|        |   |

SCI 450 Natural History of California: A Field Course

#### Capstone Course

BIS 499 Interdisciplinary Studies Project

#### Student Teaching Requirements

(5 courses; 21 quarter units) (Prerequisites: ALL MAJOR coursework must be completed satisfactorily including the GPA requirement for TED courses.)

Candidates MUST pass CSET prior to Student Teaching. RICA may be taken before or after student teaching. TED 470 and 465 A, B, C, and D are field experience or seminar courses receiving an Honors, Satisfactory or Unsatisfactory grade and are not factored into the cumulative GPA.

| TED 465A | Student Teaching I                                      |
|----------|---|
|          | (Prerequisites: Completion of all upper-division course |
|          | requirements, including all TED coursework)             |
| TED 465B | Student Teaching II                                     |
|          | (Prerequisites: Completion of all upper-division course |
|          | requirements, including all TED coursework)             |
| TED 465C | Student Teaching III                                    |
|          | (Prerequisites: Completion of all upper-division course |
|          | requirements, including all TED coursework)             |
| TED 465D | Student Teaching IV                                     |
|          | (Prerequisites: Completion of all upper-division course |
|          | requirements, including all TED coursework)             |
| TED 470  | Student Teaching Seminar and e-Portfolio Assessment*    |
|          | (3 quarter units)                                       |
|          | *Must be taken concurrently with TED 465 A-D.           |
|          |   |

## Major in Mathematics with a Preliminary Single Subject Credential (California)

## (610-105-205)

Lead Faculty: For Mathematics B.A.: Igor Subbotin • (310) 662-2150 • isubboti@nu.edu

For Credential: Zhonghe Wu • (310) 662-2134 • zwu@nu.edu

The Bachelor of Art in Mathematics with a Preliminary Single Subject Credential provides a rigorous education that prepares candidates for a career as a teacher of Mathematics at the middle and secondary school levels. The program stresses foundation in mathematics and its application. This program prepares candidates for professional work as single subject teachers in a changing cultural and economic environment. Candidates are required to complete all required coursework as well as the Basic Skills requirement and CSET to receive a credential.

### **Degree Requirements**

To receive a Bachelor of Art in Mathematics with a Single Subject Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

#### Program Outcomes

Preliminary Single Subject Credential, students will:

- experience, master, and apply skills and knowledge in problem solving;
- use language and mathematical symbols to communicate mathematical ideas;
- demonstrate a variety of reasoning skills;
- investigate the connections and interplay among various mathematical topics and their applications that cover range of phenomena across appropriate disciplines;
- use current technology tools, such as computers, calculators, graphing utilities, video, and interactive programs that is appropriate for the research and study in mathematics;
- understand the classic and modern algebra as a fundamental language through which mathematics is communicated;
- · develop fundamental knowledge of geometry;
- model real world problems with a variety of algebraic and transcendental functions in order to translate between the tabular, symbolic, and graphical representation of functions;
- understand the beauty of pure number theory, including such advanced topics as diophantine equations, number-theoretic functions, quadratic reciprocity, primitive roots, and continued fractions;
- use advanced statistics and probability concepts and methods to analyze and study different real-world problems;
- demonstrate application of educational technology to meet the needs of all learners including those with special needs and linguistically and culturally diverse students;
- demonstrate knowledge of adolescent development in order to explain how to support growth in cognitive, social, physical, and emotional domains;
- utilize different teaching strategies to accomplish educational goals;
- demonstrate a thorough understanding of the learning needs of students to create positive learning environments that ensure healthy human growth;
- demonstrate understanding through use of systematic observations, documentation, and other effective assessment strategies in a responsible manner to facilitate and account for learning, and to support positive growth;
- design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas;
- consider students' knowledge when designing, implementing, and assessing curriculum to promote developmentally appropriate learning outcomes for all children;
- adhere to professional standards and ethics.

## **General Education Requirements**

(81 quarter units)

The General Education requirements are listed below.

## **AREA A: English Communication**

(15 quarter units required)

## AREA B: Mathematical Concepts and Quantitative Reasoning.

(13.5 -15 quarter units required)

| MTH 210  | Introduction to Probability and Statistics |
|----------|--|
|          | (Prerequisite: Placement Evaluation)       |
| MTH 215  | College Algebra and Trigonometry           |
|          | (Prerequisite: Placement Evaluation)       |
| or       |  |
| MTH 216A | College Algebra and Trigonometry I         |
|          | (Prerequisite: placement evaluation)       |
| and      |  |
| MTH216 B | College Algebra and Trigonometry II        |
|          | (Prerequisite placement evaluation)        |

MTH 220 Calculus I

(*Prerequisites: MTH 215 or MTH 216 A/B, or placement equivalent*)

## **AREA C: Information Literacy and Technology** (4.5 quarter units required)

AREA D: Arts and Humanities

(13.5 quarter units required)

## **AREA E: Social and Behavioral Sciences** (13.5 quarter units required)

## **AREA F: Physical and Biological Sciences**

(10.5 quarter units required with 1 lab)

## **AREA G: Modern Language**

(9 quarter units required)

See the General Catalog for Modern Language requirement

## Preparation for the Major

(5 courses; 19.5 quarter units)

| MTH 221 | Calculus II   |
|---------|---|
|         | (Prerequisites: MTH 220)                              |
| MTH 222 | Calculus III  |
|         | (Prerequisites: MTH 221)                              |
| MTH 223 | Calculus IV   |
|         | (Prerequisites: MTH 222)                              |
| TED 320 | Introduction to Teaching as a Profession (1.5 quarter |
|         | units) (includes 30 hours of field experience)        |
| ENG 350 | Fundamentals of Linguistics                           |
|         | (Prerequisites: ENG 100/101)                          |
|         |   |

Passage of Basic Skills requirement and completion of TED 320 is required before taking any other TED courses required for the major.

## **Mathematics Requirements**

(11 courses; 49.5 quarter units)

| MTH 311 | Topics from Geometry<br>(Prerequisites: MTH 215 or MTH 216 A/B or placement                                       |
|---------|---|
|         | evaluation)   |
| MTH 325 | Discrete Structures and Logic Design<br>( <i>Prerequisites: MTH 215 or MTH 216 A/B, or placement evaluation</i> ) |
| or      |   |
| CSC 331 | Discrete Structures and Logic<br>( <i>Prerequisite: CSC 252, CSC 310</i> )  |
| MTH 411 | Number Theory   |
|         | (Prerequisites: MTH 215 or MTH 216 A /B or 301 or   |
|         | placement evaluation)   |
| MTH 435 | Linear Algebra  |
|         | (Prerequisites: MTH 325 and MTH 220)  |
| MTH 416 | Algebraic Structures  |
|         | (Prerequisites: MTH 325 and MTH 435)  |
| MTH 417 | Foundation of Geometry  |
|         | (Prerequisites: MTH 215 or MTH 216A/B and MTH 311)  |
| MTH 418 | Statistical Analysis  |
|         | (Prerequisites: MTH 210 and MTH 220)  |
| MTH 412 | History of Mathematics  |
|         | (Prerequisites: MTH 215, MTH 216A/B, or MTH 301)  |
| MTH 410 | Computer Technology in the Mathematics Classroom  |
|         | (Prerequisites: MTH 215 or MTH 216 A/B or MTH 301)  |
| MTH 460 | Problem Solving Strategies  |
|         | (Prerequisites: MTH 416 or MTH 417)   |
| MTH 461 | Methods of Teaching of Math   |
|         | (Prerequisites: MTH 311, MTH 325, MTH 412, MTH 460)   |
|         |   |

## **Education Theory and Methodology Requirements**

(7 courses; 31.5 quarter units)

All Teacher Education coursework has a field experience component. Students must maintain a 3.0 GPA within all TED coursework. Grades of "D" or "F" are not acceptable.

| TED 300  | Fundamentals of Education                                   |
|----------|---|
|          | (Prerequisites: Admission to the Teacher Education program, |
|          | ENG 100/101, TED 320)                                       |
| TED 310  | Development and Learning                                    |
|          | (Prerequisites: Admission to the Teacher Education program, |
|          | ENG 100/101, TED 320)                                       |
| TED 330B | Reading and Language Arts Methods – Secondary               |
|          | (Prerequisites: Admission to the Teacher Education program, |
|          | ENG 100/101, TED 320, TED 300 and TED 310)                  |
| TED 340  | Reading in the Content Area                                 |
|          | (Prerequisites: Admission to the Teacher Education program, |
|          | ENG 100/101, TED 320, TED 300 and TED 310)                  |
| TED 420  | Diversity in Teaching and Learning                          |
|          | (Prerequisites: ENG 100/101, TED 320)                       |
| TED 430  | Instructional Strategies for Students with Special Needs    |
|          | (D  |

(Prerequisites: ENG 100/101, TED 320) TED 440 Classroom Leadership and Assessment Seminar (Prerequisites: ENG 100/101, TED 320)

## **Student Teaching Requirements**

## (5 courses; 21 quarter units)

(Prerequisites: ALL MAJOR coursework must be completed satisfactorily including the GPA requirement for TED courses.)

Students must pass CSET prior to beginning student teaching. TED 470 and 465 A, B, C, and D are field experience courses receiving an Honors, Satisfactory or Unsatisfactory grade and are not factored into the cumulative GPA.

| TED 465A | Student Teaching I                                     |
|----------|--|
|          | Completion of all upper-division course requirements,  |
|          | including all TED coursework.)                         |
| TED 465B | Student Teaching II                                    |
|          | Completion of all upper-division course requirements,  |
|          | including all TED coursework.)                         |
| TED 465C | Student Teaching III                                   |
|          | Completion of all upper-division course requirements,  |
|          | including all TED coursework.)                         |
| TED 465D | Student Teaching IV                                    |
|          | Completion of all upper-division course requirements,  |
|          | including all TED coursework.)                         |
| TED 470  | Student Teaching Seminar and e-Portfolio Assessment (3 |
|          | quarter units)   |
|          | (Must be taken concurrently with TED 465 A-D.)         |

## **Credentialing Requirement**

Additional course for satisfying SB 2042 and CTC for California Teaching Credential

(1 course; 4.5 quarter units)

\*Students must have senior standing to enroll in this class. The following course is graduate level. The grade earned must be a "B" or better. This course will not transfer to any graduate level program (at National University or elsewhere).

HEDX 1201X Health Education for Teachers

## ♦ Major in Persian Studies

## (610-488)

Faculty Advisor: John Lown • (858) 642-8397 • jlown@nu.edu

The Bachelor of Arts with a Major in Persian Studies consists of intensive proficiency-oriented coursework in Persian language acquisition, as well as instruction in essential knowledge and understanding of history, culture, geography, and politics of the Persian speaking countries. The program prepares students for a variety of career paths in government, military, business, and education.

## **Requirements for the Degree**

To receive the Bachelor of Arts Degree with a Major in Persian Studies, students must complete at least 180 quarter units as listed below, 45 of which must be completed in residence at National University, and 76.5 of which must be completed at the upperdivision level. The following courses are degree requirements. In the absence of transfer credit, general electives may be necessary to satisfy the total units required for the degree. Students should refer to the section on undergraduate admission requirements for specific information regarding admission and evaluation. If the foreign language requirement is not completed in General Education, the equivalent must be completed as preparation for the Persian Studies major, or by testing or by coursework equivalent preparation.

## Program Outcomes:

A graduate of the Bachelor of Arts with a Major in Persian Studies will demonstrate:

- An advanced proficiency in Persian listening, speaking and reading.
- A command of both formal/written and informal/spoken Persian.
- A satisfactory knowledge of the language for translating and interpreting to and from Persian.
- An operational knowledge of Persian vocabulary and grammar.
- An understanding of major aspects of Persian culture and civilization from pre-Islamic times to the present.
- A general familiarity with the history of Iran.
- A basic familiarity with Islam and its influence on Iran.
- Familiarity with modern issues in regards to Iran.

## Preparation for the Major

(9 courses; 28.5 quarter units)

| FAS 100  | Beginning Persian I *                           |
|----------|---|
|          | (Co-requisite: FAS 100A)                        |
| FAS 100A | Beginning Persian I Lab (1.5 quarter units)     |
|          | (Co-requisite: FAS 100)                         |
| FAS 101  | Beginning Persian II *                          |
|          | (Prerequisites: FAS 100/100A)                   |
|          | (Co-requisite: FAS 101A)                        |
| FAS 101A | Beginning Persian II Lab (1.5 quarter units)    |
|          | (Prerequisites: FAS 100/100A)                   |
|          | (Co-requisite: FAS 101)                         |
| FAS 200  | Intermediate Persian I *                        |
|          | (Prerequisites: FAS 101/101A)                   |
|          | (Co-requisite: FAS 200A)                        |
| FAS 200A | Intermediate Persian I Lab (1.5 quarter units)  |
|          | (Prerequisites: FAS 101/101A)                   |
|          | (Co-requisite: FAS 200)                         |
| FRP 201  | Intermediate Persian II *                       |
|          | (Prerequisites: FAS 200/200A)                   |
|          | (Co-requisite: FRP 201A)                        |
| FRP 201A | Intermediate Persian II Lab (1.5 quarter units) |
|          | (Prerequisites: FAS 200/200A)                   |

|         | (Co-requisite: FRP 201)      |
|---------|------------------------------|
| LIT 100 | Introduction to Literature * |
|         | (Prerequisites: ENG 100/101) |

\* May be used to meet General Education requirements

## **Requirements for the Major**

(11 courses, 43.5 quarter units)

| FRP 300  | Advanced Persian I                             |
|----------|--|
|          | (Prerequisites: FRP 201/201A)                  |
|          | (Co-requisite: FRP 300A)                       |
| FRP 300A | Advanced Persian I Lab (1.5 quarter units)     |
|          | (Prerequisites: FRP 201/201A)                  |
|          | (Co-requisite: FRP 300)                        |
| FRP 301  | Advanced Persian II                            |
|          | (Prerequisites: FRP 300/300A)                  |
|          | (Co-requisite: FRP 301A)                       |
| FRP 301A | Advanced Persian II Lab (1.5 quarter units)    |
|          | (Prerequisites: FRP 300/300A)                  |
|          | (Co-requisite: FRP 301)                        |
| FRP 400  | Advanced Persian Conversation                  |
|          | (Prerequisites: FRP 301/301A)                  |
| SOC 362  | Persian Culture                                |
|          | (Prerequisites: ENG 100/101)                   |
| HIS 339  | History of the Middle East 600-1600            |
|          | (Prerequisites: ENG 100/101)                   |
| HIS 342  | Modern History of the Middle East              |
|          | (Prerequisites: ENG 100/101)                   |
| PHL 332  | Religion of Islam                              |
|          | (Prerequisites: ENG 100/101)                   |
| POL 410  | Middle Eastern Politics                        |
|          | (Prerequisites: ENG 100/101)                   |
| LIT 320  | Contemporary Persian Literature in Translation |
|          | (Prerequisite: LIT 100)                        |

## **Upper-Division Electives**

(7 courses, 31.5 quarter units) Choose seven courses from the following lists.

| GLS 430 | The Global Economy                       |
|---------|--|
|         | (Prerequisite: ENG 240)                  |
| HIS 431 | The Ancient World                        |
|         | (Prerequisites: ENG 100/101 and HIS 233) |
| HIS 434 | The Modern World, 1500 to the Present    |
|         | (Prerequisites: ENG 100/101 and HIS 234) |
| LIT 463 | 20th Century World Literature            |
|         | (Prerequisite: LIT 100)                  |
| PHL 320 | Comparative Religion                     |
|         | (Prerequisites: ENG 100/101)             |
| POL 340 | Comparative Politics                     |
|         | (Prerequisites: ENG 100/101)             |
| SOC 328 | Intercultural Thinking and Creativity    |
|         | (Prerequisites: ENG 100/101)             |
| PRS 350 | Fundamentals of Persian Translation      |
|         | (Prerequisites: PRS 301/301A)            |
| SOC 423 | Iranian Cinema                           |
|         | (Prerequisites: ENG 100/101)             |
| POL 415 | Petroleum and the Persian Gulf           |

## • Major in Political Science

(610-447)

Lead Faculty: Shak Hanish • (858) 642-8494 • shanish@nu.edu

Political science, the systematic and rigorous study of politics and government, is becoming increasingly crucial in a complex and controversial world. Current cynicism about politics and public leadership belies a need for responsive, representative, effective, and capable public authority. Citizens still expect government to tackle such intimidating social problems, such as healthcare, community security, economic, and social justice and the balancing of conflicting rights and freedoms. Political science analyzes the ways societies use public authority to address collective problems.

The political science program is designed to equip students with specialized research and analytical skills as well as familiarity with more generalized problem-solving skills sufficient to allow them to make valuable contributions to any vocation or enterprise they pursue and to insure that they will be prepared to solve public problems.

The Bachelor of Arts in Political Science will engage students in the study of social, economic, and political life, nationally and globally. A bachelor's degree in political science can lead to exciting careers in federal, state, and local governments; law, business, and international organizations; nonprofit associations and organizations; campaign management, electoral politics, and polling; journalism; , and research and teaching.

## **Degree Requirements**

To be awarded a Bachelor of Arts in Political Science, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

## **Program Outcomes**

A graduate of the Bachelor of Arts in Political Science program should be able to:

- Demonstrate a mastery of the major theories, concepts, and methods of political science—empirical, normative, and policyoriented;
- Demonstrate professional competencies essential to the independent and collaborative practice of political science research and analysis;
- Apply the methods used by political scientists to undertake research and answer questions about politics and government;
- Interpret key political science perspectives and theories and apply them to real-world situations;
- Demonstrate undergraduate-level written communication skills;
- Demonstrate undergraduate-level oral communication and presentation skills;
- Apply analytical and critical thinking skills.

## Preparation for the Major

(3 courses; 13.5 quarter units)

| POL 100     | Introduction to Political Science*          |
|-------------|---|
|             | (Prerequisites: ENG 100/101)                |
| POL 201     | American Government and Politics*           |
|             | (Prerequisites: ENG 100/101)                |
| MTH 210     | Introduction to Probability and Statistics* |
|             | (Prerequisites: Placement Evaluation)       |
| *May be use | ed to meet a general education requirement. |

## **Requirements for the Major**

(9 courses; 40.5 quarter units)

| POL 320 | Politics of Social Movements (Prerequisites: ENG 100/101)                            |
|---------|--|
| POL 330 | Political Theory   |
| POL 340 | (Prerequisites: ENG 100/101)<br>Comparative Politics<br>(Prerequisites: ENG 100/101) |
|         | •  |

- POL 350 International Relations (Prerequisites: ENG 100/101) POL 360 Public Policy (Prerequisites: ENG 100/101)
- POL 400 European Politics (Prerequisites: ENG 100/101)
- POL 410 Middle Eastern Politics
- (*Prerequisites: ENG 100/101*) POL 540 The American Political System
- POL 499 Capstone Seminar in Political Science (Prerequisites: ENG 240 and completion of at least 27 units of core courses in the major.)

## **Required Upper-Division Electives**

(7 courses; 31.5 quarter units)

| Students should choose from the following upper-division electives: |  |  |
|---|--|--|
| CJA 467   | International and Domestic Terrorism               |  |
| COM 380   | Democracy in the Information Age                   |  |
|   | (Prerequisites: ENG 100/101)                       |  |
| GLS 410   | Gender Studies: Gender Identity- Global Context    |  |
|   | (Prerequisites: ENG 240)                           |  |
| GLS 430   | The Global Economy                                 |  |
|   | (Prerequisites: ENG 240)                           |  |
| HIS 320   | Culture, Capitalism and Technology in Modern World |  |
|   | History  |  |
|   | (Prerequisites: ENG 100/101)                       |  |
| HIS 350   | Cultural Diversity                                 |  |
|   | (Prerequisites: ENG 100/101)                       |  |
| HUM 501   | Civic Culture and Global Awareness                 |  |
|   | (Prerequisites: ENG 100/101)                       |  |
| PAD 403   | Government and Community Relations                 |  |
| PHL 320   | Comparative Religion                               |  |
|   | (Prerequisites: ENG 100/101)                       |  |
| PHL 375   | Environmental Ethics                               |  |
|   | (Prerequisites: ENG 100/101)                       |  |
| POL 490   | Guided Study                                       |  |
| POL 539   | Dynamics of World Politics                         |  |
| SOC 385   | Methods of Social Inquiry                          |  |
|   | (Prerequisites: SOC 100, MTH 210, and ENG 100/101) |  |
| SOC 445   | Contemporary Social Problems                       |  |
|   | (Prerequisites: ENG 100/101)                       |  |
| SOC 540   | Power and Social Change                            |  |
|   | (Prerequisites: ENG 100/101)                       |  |
|   |  |  |

## Major in Pre-Law Studies

(610-422)

Faculty Advisor: Jack B. Hamlin • (858) 642-8405 • jhamlin@nu.edu

The Bachelor of Arts in Pre-Law Studies program provides students with the well rounded education needed for admission to law schools. Emphasis is placed on the verbal, critical thinking, and analytical skills that are considered vital for success as a law student and as a member of the legal profession. This major also allows students interested in a career in business or government to gain an understanding of the complex legal issues they will face in their professions.

## Program Outcomes

Upon successful completion of this program, students will be able to:

- Apply critical legal thinking in analyzing judicial decisions
- Describe, analyze, and anticipate legal issues in a business environment
- Review and analyze contemporary legal issues in the state, federal, and administrative law forums.

- Analyze issues by application of relevant rules of law, ethical standards, and social mores
- Develop a clear and concise legal argument supporting a position on a given legal topic
- Demonstrate written, oral communication, and presentation skills.
- Describe and analyze need for effective planning in preparation for the negotiation process

## **Degree Requirements**

To earn a Bachelor of Arts with a Major in Pre-Law Studies, students must complete at least 180 quarter units as described below. 76.5 quarter units must be completed at the upper-division level and 45 must be completed in residence at National University. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

## Prerequisites for the Major

(5 courses; 22.5 quarter units)

| ENG 100<br>ENG 101   | Effective College English I (3 quarter units) *<br>Effective College English II (3 quarter units)*<br>(Prerequisite: ENG 100) |  |
|--|---|--|
| SOC 100  | Principles of Sociology (+)*<br>(Prerequisites: ENG 100/101)  |  |
| <i>or</i><br>PSY 100<br>POL 201                              | Introduction to Psychology*<br>American Government and Politics*<br>(Prerequisites: ENG 100/101)                              |  |
| <i>or</i><br>PHL 100   | Introduction to Philosophy*<br>(Prerequisites: ENG 100/101)   |  |
| LAW 200  | Introduction to Law and Legal Writing   |  |
| <b>Requirements for the Major</b><br>(9 courses; 40.5 units) |   |  |
| LAW 400<br>LAW 304<br>LAW 305                                | Current Legal Issues<br>Legal Aspects of Business I<br>Legal Aspects of Business II<br>( <i>Prerequisite: LAW 304</i> )       |  |
| LAW 310  | Litigation  |  |
| LAW 402<br>or  | The Art of Negotiation  |  |
| ADR 405  | Negotiation Fundamentals  |  |
| LAW 405<br>LAW 408   | Analytical Reasoning<br>Legal Writing, Research, and Oral Argument  |  |
| LAW 420  | Oral Advocacy – Capstone  |  |
| or<br>LAW 470  | Pre-Law Senior Project<br>(Prerequisites: LAW 310, LAW 400, and LAW 408)  |  |
| ADR 400  | Alternative Dispute Resolution  |  |
| Unner Division Flortives                                     |   |  |

## Upper-Division Electives

(7 courses; 31.5 units)

Choose seven upper-division degree related electives. The courses noted with an "\*" below are strongly recommended.

- LAW 430 Constitutional Law\*
- LAW 440 Comparative International Law
- LAW 445 Administrative Law for Business

| LAW 455 | Public Contracting                      |
|---------|---|
| LAW 460 | Law School Portfolio Project*           |
| ADR 410 | Facilitation Fundamentals*              |
| ADR 415 | Mediation Fundamentals*                 |
| ADR 420 | Communication and Conflict*             |
| ADR 425 | Cultural Issues in Conflict Management* |
| ADR 430 | Ethics and Neutrality*                  |
| CJA 464 | Constitutional Law for Criminal Justice |
| SOC 445 | Contemporary Social Problems            |
|         | (Prerequisites: ENG 100/101)            |
| PHL 437 | Ethics*                                 |
|         | (Prerequisites: ENG 100/101)            |
| ENG 432 | Report and Research Paper Writing       |
|         | (Prerequisites: ENG 100/101)            |
|         | •                                       |

## ◆ Major in Psychology <sup>(†)</sup>

## (610-104)

Faculty Advisor: Brenda Shook • (916) 855-4108 • bshook@nu.edu

The Bachelor of Arts in Psychology program offers a comprehensive introduction to the contemporary discipline of psychology. Graduates of this program are well prepared to seek employment in personnel, vocational counseling, criminal justice, journalism, or entry-level counseling in the context of a county-funded agency or hospital. They are also prepared to seek admission to graduate programs at the master's or doctoral level.

## **Program Outcomes**

The primary program outcomes and competencies are:

- Competency in classification and research of psychopathology.
- Knowledge and understanding of developmental psychology throughout the life span.
- Mastery of theory and research of personality and psychological characteristics of the individual.
- Knowledge of social influences on behavior.
- Ability to write a comprehensive paper that covers empirical and theoretical study of a specific topic related to the major.
- Understanding of the history of substance abuse, and individual social, cultural, and institutional values that underlie substance abuse and dependency.
- Knowledge of the social service structure for prevention and treatment of substance abuse and dependency.
- Knowledge of neurological, physiological, and biological bases of behavior.
- Knowledge of theory and principles of cognitive psychology and the cognitive approach to understanding the mind and behavior
- Understanding of basic data analysis techniques in psychology and the ability to perform simple statistical calculations.
- Mastery of the fundamental ideas in the history of psychology and how they relate to contemporary theories and systems.
- Sensitivity to diversity issues and awareness of multiculturalism.

## **Degree Requirements**

To receive a Bachelor of Arts in Psychology degree, students must complete at least 180 quarter units as articulated below, 76.5 of which must be completed at the upper-division level and 45 of which must be completed in residence at National University. The following courses are specific degree requirements. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

#### Preparation for the Major

(2 courses; 9 quarter units)

| MTH 210 | Introduction to Probability and Statistics* |
|---------|---|
|         | (Prerequisite: Placement Evaluation)        |
| PSY 100 | Introduction to Psychology*                 |

\*May be used to satisfy general education requirements.

## **Requirements for the Major**

(10 courses; 45 quarter units)

| PSY426  | History of Psychology  |
|---------|--|
|         | (Prerequisites: ENG 100/101 and PSY 100)                     |
| PSY 427 | Biological Psychology  |
|         | (Prerequisites: ENG 100/101 and PSY 100)                     |
| PSY 428 | Developmental Psychology                                     |
|         | (Prerequisites: ENG 100/101 and PSY 100)                     |
|         | (PSY301 may not be substituted for this course)              |
| PSY 429 | Introduction to Personality Theory                           |
|         | (Prerequisites: ENG 100/101 and PSY 100)                     |
| PSY 430 | Introduction to Psychopathology                              |
|         | (Prerequisites: ENG 100/101 and PSY 100)                     |
| PSY 432 | Social Psychology  |
|         | (Prerequisites: ENG 100/101 and PSY 100)                     |
| PSY 433 | Cognitive Psychology   |
|         | (Prerequisites: ENG 100/101 and PSY 100)                     |
| PSY 435 | Analysis of Data in Psychological Research                   |
|         | (Prerequisites: ENG 100/101, MTH 210 and PSY 100)            |
| CHD 440 | Drugs, Values and Society                                    |
| PSY 480 | Senior Project (two-month course)                            |
|         | (Prerequisites: All other core courses)                      |
| or      | ,  |
| PSY 491 | Guided Studies for Honors Students (two-month course)        |
|         | (Prerequisite: Completion of core courses with a GPA of 3.75 |
|         |  |

## **Upper-Division Electives**

(6 courses; 27 quarter units)

Students not pursuing a minor must choose six upper-division electives from courses with the following prefixes: HUB, PSY, SOC, HRM, and CJA. Other electives must be approved by the department chair or regional full-time or associate faculty. Students may not take PSY 301 as an upper-division elective.

or higher and approval of the Department Chair.)

## ◆ Major in Sociology <sup>(†)</sup>

## (610-445)

Faculty Advisor: Lorna L. Zukas • (858) 642-8437 • lzukas@nu.edu

The Bachelor of Arts in Sociology program engages students in the study of social life, social change, and the social causes and consequences of human behavior. Students will investigate the structure of groups, organizations, and societies, and how people interact within these contexts. Since all human behavior is social, the subject matter of sociology ranges from the intimate family to global warfare; from organized crime to religious cults; from the divisions of social class, race, and gender to the shared beliefs of a common culture; and from the sociology of work to the sociology of beauty. In fact, few fields have such broad scope and relevance for research, theory, and application of knowledge.

Sociology majors develop analytical skills and the ability to understand issues within many distinctive perspectives. Sociology offers a range of research techniques that can be applied to virtually any aspect of social life: street crime and delinquency, corporate growth or downsizing, how people express emotions, welfare or education reform, health/HIV AIDS, how families differ and flourish, or problems of peace, war, and terrorism. Because sociology

addresses the most challenging issues of our time, it is a rapidly expanding field whose potential is increasingly tapped by those who craft policies and create programs. Sociologists understand social inequality, patterns of behavior, forces for social change and resistance, and how social systems work.

The program's stimulating curriculum in social theory, research methods, and key sociological concepts provides a solid base for students to learn to think abstractly, formulate problems, ask appropriate questions, search for answers, analyze situations and data, organize material, write well, and make oral presentations. Sociological training helps students bring breadth and depth of understanding to the global workplace and graduates frequently enter a variety of jobs in business, the health professions, criminal justice, social services, and government. Sociology provides training for professions such as law enforcement, education, medicine, social work, and counseling. Furthermore, sociology offers valuable preparation for careers in journalism, politics and policy analysis, public relations, business, or public administration, and program evaluation—fields that involve investigative skills and working with diverse groups.

## **Program Outcomes**

Many occupations today require a college educated individual who can write and speak well, solve problems, learn new information quickly, and work well with others on a team. This means that graduates use their education in a wide variety of fields, and their future career may relate more to their personal career interests, work values, and transferable skills than any specific academic major. The program in Sociology seeks to provide students with a comprehensive background for graduate level study and for careers in social service, probation/parole, mental health, and related areas.

Sociology provides important background knowledge as well as:

- Professional competencies essential to the independent and collaborative practice of social research and analysis.
- Exposure to the methods used by sociologists to undertake social research and answer questions about society.
- Exploring the connection between the individual and society and analyzing the social construction of reality.
- Interpreting key sociological perspectives and theories and applying them to real-world situations.
- Recognizing the role of race, ethnicity, gender, and class in society and analyze peoples' roles in making, maintaining, or changing society.
- Demystifying social institutions through demonstrated knowledge of social structure, status, roles, groups, and organizations.
- Demonstration of undergraduate-level written communication skills.
- Demonstration of undergraduate-level oral communication and presentation skills.
- Application of analytical and critical thinking skills.

## **Degree Requirements**

To be awarded a Bachelor of Arts in Sociology, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. All courses required in the major and required upper-division electives for the degree must be completed with a C- or better. Students are required to complete a capstone project as part of the degree program. It is strongly suggested that students save all graded work. Students should refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

#### Prerequisites for the Major

(2 courses; 9 quarter units)

| SOC 100  | Principles of Sociology* (+)                |
|--|---|
|  | (Prerequisites: ENG 100/101)                |
| MTH 210  | Introduction to Probability and Statistics* |
|  | (Prerequisite: Placement Evaluation)        |
| * May be used to satisfy general education requirements. |   |

## **Requirements for the Major**

(9 courses 40.5 quarter units)

| Marriage, Sex and Family<br>(Prerequisites: ENG 100/101) |
|--|
| Sociology of Deviance                                    |
| (Prerequisites: SOC 100 and ENG 100/101)                 |
| Methods of Social Inquiry                                |
| (Prerequisites: SOC 100, MTH 210, and ENG 100/101)       |
| Organizational Sociology                                 |
| (Prerequisites: SOC 100 and ENG 100/101)                 |
| Classical Social Theory                                  |
| (Prerequisites: SOC 100 and ENG 100/101)                 |
| Understanding Cultural Pluralism in American Society     |
| (Prerequisites: ENG 100/101)                             |
| Contemporary Social Theory                               |
| (Prerequisites: SOC 100 and ENG 100/101)                 |
| Power and Social Change                                  |
| (Prerequisites: ENG 100/101)                             |
| Sociological Research Seminar (Capstone Seminar)         |
| (Prerequisite: SOC 100 and ENG 240 or equivalent)        |
|  |

The Capstone Seminar is taken toward the end of the program after completion of the 40.5 units of required courses for the major, and after completion of six or more electives.

## **Required Upper-Division Electives\***

(7 courses; 31.5 quarter units)

Students must complete a minimum of seven courses (31.5 quarter units) of electives from the list below. \*Students wishing to complete a minor in any field may substitute the minor-required courses to fulfill the elective requirements in Sociology. Suggested areas of minor are: Criminal Justice, Counseling, Global Studies, History, and Video Gaming.

| SOC 449 | Sociology of Law                         |
|---------|--|
|         | (Prerequisites: SOC 100 and ENG 100/101) |
| SOC 460 | The Individual and Society               |
|         | (Prerequisites: SOC 100 and ENG 100/101) |
| SOC 331 | Sociology of Health and Illness          |
|         | (Prerequisites: SOC 100 and ENG 100/101) |
| SOC 325 | Contemporary Popular Culture             |
|         | (Prerequisites: ENG 100/101)             |
| SOC 328 | Intercultural Thinking/Creativity        |
|         | (Prerequisites: ENG 100/101)             |
| SOC 336 | American Film and Society                |
|         | (Prerequisites: ENG 100/101)             |
| SOC 430 | Culture, Technology and Society          |
|         | (Prerequisites: ENG 100/101)             |
| SOC 445 | Contemporary Social Problems             |
|         | (Prerequisites: ENG 100/101)             |
| SOC 490 | Guided Study                             |
| CJA 448 | Violence and Society                     |
| GLS 410 | Gender Identity in a Global Context      |
|         | (Prerequisite: ENG 240)                  |
| GLS 430 | The Global Economy                       |
|         | (Prerequisite: ENG 240)                  |
| HIS 350 | Cultural Diversity                       |
|         | (Prerequisites: ENG 100/101)             |
| HUM 501 | Civic Culture and Global Awareness       |
|         |  |

(Prerequisites: ENG 100/101)

| MTH 412 | History of Mathematics                           |
|---------|--|
|         | (Prerequisites: MTH 215, MTH 216A/B, or MTH 301) |
| MUL 325 | Psychology of Video Games                        |
|         | (Prerequisite: PSY 100)                          |
| PHL 320 | Comparative Religion                             |
|         | (Prerequisites: ENG 100/101)                     |
| PHL 375 | Environmental Ethics                             |
|         | (Prerequisites: ENG 100/101)                     |
| POL 320 | Politics of Social Movements                     |
|         | (Prerequisites: ENG 100/101)                     |
| SCI 300 | Geography: Mapping the World                     |
|         |  |

## BACHELOR OF PUBLIC ADMINISTRATION

#### (640)

Faculty Advisor: Chandrika Kelso • (858) 642-8433 • Ckelso@nu.edu

The Bachelor of Public Administration (BPA) is designed to meet the educational and professional needs of individuals in the public sector who are interested in professional or career advancement. It also prepares individuals for challenging and dynamic careers in government at the local, state, and federal levels. Individuals completing the program are prepared for mid-level positions, teaching, or training assignments, or research in the government and nonprofit organizations.

## **BPA/MPA Transition Program**

Students who are currently enrolled in the Bachelor of Public Administration program and have at least a GPA of 3.0 and are within six courses of graduation, may register for the BPA/MPA transition program by taking two MPA classes as electives during the BPA program. To be eligible, students must apply for and begin the MPA program within six months of completing their BPA program. Students may choose up to two of the graduate-level public administration courses (with the exception of PAD 631 and PAD 644). For students in the BPA/MPA transition program, the University will waive up to two graduate-level public administration courses taken as part of the bachelor's degree, but these students must still meet the residency requirements for the MPA. Students must complete graduate level coursework taken as part of the BPA degree with a grade of "B" or better.

## **Program Outcomes**

Upon successful completion of this program, learners will be able to:

- Describe and synthesize the theories of public administration.
- Describe and analyze the operations and procedures of public management and nonprofits.
- Develop skills in managing a public sector or nonprofit organization.
- Describe and develop skills in applying the theories and practices in program and resource management
- Describe and develop skills in applying the theories and practices of accounting and budgeting in government and nonprofits.
- Describe and evaluate the role of community groups in local government.
- Describe and analyze ethical situations.
- Develop an experimental design, including a testable research hypothesis to address a current problem in public administration.
- Complete a research project in the area of public administration: Collect data, conduct a literature review, analyze data, write and explain findings, and present results orally and/or in writing.

## **Degree Requirements**

To receive a Bachelor of Public Administration, students must

complete at least 180 quarter units as described below, 76.5 of which must be completed at the upper-division level and 45 of which must be completed in residence at National University. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Refer to the section of undergraduate admission procedures for specific information regarding application and evaluation.

## **General Education Program Requirements**

The general education program consists of a minimum of 70.5 quarter units. Of the 70.5 units, students must complete at least 45 units at the upper-division level and 4.5 units in diversity enriched coursework. A plus [+] indicates a diversity enriched offering. All undergraduate students working toward any associate or bachelor's degree must meet the University diversity requirement.

National University has general education requirements in the following eight areas:

## AREA A: ENGLISH COMMUNICATION

(Minimum 15 quarter units)

## AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

## AREA C: INFORMATION LITERACY

(Minimum 4.5 quarter units)

## AREA D: ARTS AND HUMANITIES

(Minimum 13.5 quarter units)

## AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(Minimum 13.5 quarter units)

## AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(Minimum 6 quarter units required. Note: one science lab is required)

#### AREA G: MODERN LANGUAGE

(Minimum 9 quarter units)

## AREA A-G: GENERAL EDUCATION

(Minimum 4.5 quarter units)

Courses taken to achieve minimum levels of collegiate-level competency in the areas of writing and mathematical concepts and systems do not satisfy any portion of the general education requirement.

### Preparation for the Major

(3 courses; 13.5 quarter units)

- ACC 201 Financial Accounting Fundamentals
- ECO 203 Principles of Microeconomics\*
- MNS 205 Introduction to Quantitative Methods for Business\* (*Prerequisite: Placement evaluation*)

\*May be used to satisfy general education requirements.

## **Requirements for the Major**

(12 courses; 54 quarter units)

- PAD 400 Introduction to Public Administration
- PAD 401 Public Policy Development
- PAD 402 Public Administration and Urban Environments
- PAD 403 Government and Community Relations
- PAD 404 Public Administration and the Nonprofit Sector
- ACC 434 Government and Nonprofit Accounting (*Prerequisite: ACC 201*)

- MGT 400 Ethics in Law, Business and Management
- ODV 420 Introduction to Organizational Behavior MGT 422 Team Building, Interpersonal Dynamics, and
- Empowerment
- LED 420 Adaptive Leadership in Change
- MNS 407 Management Science
- (Prerequisite: MNS 205)
- PAD 405 Senior Research Project (Prerequisite: completion of 36 quarter units of BPA major courses)

## **Upper-Division Electives**

(4 courses; 18 quarter units)

Students are encouraged to take any minors or electives in the following prefix areas: CJA, MGT, HRM, ODV, LAW, ACC, FIN, BKM, HUB, LED, and ECO.

## BACHELOR OF SCIENCE

(620)

Faculty Advisors: Paz Jensen • (858) 642-8471 • pjensen@nu.edu and Christine Photinos • (858) 642-8349 • cphotino@nu.edu

The general education program consists of a minimum of 70.5 quarter units. Of the 70.5 units, students must complete at least 4.5 units at the upper-division level and 4.5 units in diversity enriched coursework. A plus [+] indicates a diversity enriched offering. All undergraduate students working toward any associate or bachelor's degree must meet the University diversity requirement.

## **General Education Program Requirements**

National University has general education requirements in the following eight areas:

## AREA A: ENGLISH COMMUNICATION

(Minimum 15 quarter units)

## AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

## AREA C: INFORMATION LITERACY

(Minimum 4.5 quarter units)

## AREA D: ARTS AND HUMANITIES

(Minimum 13.5 quarter units)

## AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(Minimum 13.5 quarter units)

## AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(Minimum 6 quarter units required [Note: one science lab is required])

## AREA G: MODERN LANGUAGE

(Minimum 9 quarter units)

## AREA A-G: GENERAL EDUCATION

(Minimum 4.5 quarter units)

Courses taken to achieve minimum levels of collegiate-level competency in the areas of writing and mathematical concepts and systems do not satisfy any portion of the general education requirement.

## ◆ Major in Criminal Justice Administration ∽ ੈ

## (620-405)

Faculty Advisor: James Larson • (858) 642-8418 • jlarson@nu.edu

The Bachelor of Science in Criminal Justice Administration degree is designed to meet the educational and professional needs of individuals in law enforcement who are interested in professional development or career advancement. It also prepares individuals for challenging and dynamic careers in the justice system at the local, state, and federal levels. Individuals completing the program are prepared for entry- and advanced-level positions, teaching, or training assignments, private security employment, research, or employment as consultants within the field.

The major consists of upper-division courses that include basic forensic science, research methods, juvenile justice, corrections, criminology, leadership and management, civil and criminal investigations, court systems, criminal law, and a senior research project supervised by full-time, associate, and select core adjunct faculty. Additionally, students select elective courses from psychology, sociology, addictive disorders, behavioral science, legal studies, information technology, and human resource management to provide a broader perspective in human behavior.

## **Transition Programs**

There are two transition programs available to students in the Criminal Justice program:

## BS in Criminal Justice Administration/ Master of Forensic Science(MFS) Program

## BS in Criminal Justice Administration/ Master of Public Administration (MPA) Program

The transition program allow students who are enrolled in the BS in Criminal Justice Administration with a cumulative grade point average of at least 3.0 and who are within completing their last six courses to register for two courses in the MFS or MPA program as electives for the bachelor's degree. The two graduate courses are restricted to those that do not require a prerequisite. Students must complete all transition program coursework with a grade of B or better. Students pursuing the BSCJ/MPA program can take any two courses (with the exception of PAD 631 and PAD 644). Students pursuing the BSCJ/MFS can choose any two classes which do not require prerequisites. The number of courses required to earn an MFS or MPA degree for transition program students is reduced from 12 to as few as 10 courses. Graduate-level coursework taken as part of the criminal justice administration program cannot be applied to the Master of Forensic Science program or the Master of Public Administration program, nor will it transfer as graduate level credit to any other university because it becomes part of the undergraduate degree program.

## **Program Outcomes**

Upon completion of this program candidates will be able to:

- Describe and synthesize the contributions of the various forensic science disciplines to the current state-or-the-art of detecting and solving crimes.
- Develop an experimental design, including a testable research hypothesis to address a current problem in criminal justice.
- Provide a written description of the causes and patterns of juvenile delinquency.
- Apply biological, psychological, sociological, and economic explanations for criminal behavior from a variety of disciplines,

and present findings orally and in writing.

- Analyze and evaluate the role of criminal sanctions in rehabilitating offenders.
- Complete a research project in the area of criminal justice: Collect data, conduct a literature review, analyze data, write and explain findings, and present results.

## **Degree Requirements**

To receive a Bachelor of Science in Criminal Justice Administration, students must complete at least 180 quarter units as articulated below, 76.5 of which must be completed at the upper-division level and 45 of which must be completed in residence at National University. The following courses are specific degree requirements. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Refer to the section on undergraduate admission procedures for specific information regarding application and evaluation.

## **Requirements for the Major**

(10 courses; 45 quarter units)

| CJA 429 | Introduction to Policing    |
|---------|-----------------------------|
| CJA 449 | Research Methods            |
| CJA 431 | Criminology                 |
| CJA 437 | The Juvenile Offender       |
| CIA 446 | Criminal Justice Management |

- Criminal Justice Management and Leadership JA 446
- Principles of Investigation CJA 460
- CIA 451 Court Systems and the Judicial Process
- CJA 452 Criminal Law and Procedure
- CJA 440 Corrections
- CJA 470 Supervised Criminal Justice Senior Project\* (Prerequisite: CJA 449)

\* A two-month course that meets once per week for 4.5 quarter units. (Grading is by H, S, and U only.) Accelerated study is not permitted with CIA 470.

Students who do not complete the Senior Project within the twomonth period are eligible, at the discretion of the instructor, to receive a grade of "IP" with a maximum of a one-time six month extension. Students who do not complete the project at the end of the extension period will need to retake CJA 470. No grade of "I" (Incomplete) can be given for this course.

## **Upper-Division Electives**

(6 courses; 27 quarter units)

## **Recommended Courses**

| Gangs in America                                |
|---|
| Criminal Intelligence                           |
| Survey of Forensic Sciences                     |
| Current Issues in Law Enforcement               |
| Organized and White Collar Crime                |
| Violence in Society                             |
| Criminal Evidence                               |
| Minorities, Crime and Social Justice            |
| Constitutional Law for Criminal Justice         |
| Practicum in Criminal Justice                   |
| (1.5-9 quarter units)                           |
| International and Domestic Terrorism            |
| Human Communication                             |
| (Prerequisites: ENG 100/101, PSY100)            |
| Survey in Human Resources Management and        |
| Organizational Development                      |
| Recruiting, Selection, Promotion, and Retention |
| Introduction to Organizational Behavior         |
| Psychology for Managers                         |
| (Prerequisites: ENG 100/101, PSY100)            |
|   |

| PSY 437 | Theories |
|---------|----------|
| 101 407 | Theories |

of Psychotherapy (Prerequisites: ENG 100/101, PSY 100) SOC 445 Contemporary Social Problems (Prerequisites: ENG 100/101)

## Major in Domestic Security Management

Faculty Advisor: Dennis Porter • (310) 662-2130 • dporter@nu.edu

The Bachelor of Science in Domestic Security Management (BS-DSM) program provides graduates with a foundation in the politics and cultures of terrorist, and best security practices to cope with a pending emergency, operations during an emergency, and recovery from an emergency. The program focuses on the management aspects of disasters and emergencies. More importantly, the program focuses on developing well rounded decision makers with a strong background in leadership and ethics. Students will conduct research on various government and private sector entities and report on suggested improvements in preparing for an emergency. The program prepares graduates to work with a variety of emergency preparedness capacities such as land borders, seaports and airports, threat assessment, disaster management, and crisis response planning and management. The goal of the program is to develop both the critical acumen and theoretical outcomes before, during, and after emergencies. Graduates will develop the ability to write emergency plans, implement and manage emergency plans, and assist policy makers on recovery issues.

The BS-DSM program is designed for students who aspire to work in the private security industry or city, state or federal levels. It is also appropriate for military personnel of all ranks, mid-level managers, and managers seeking promotion within the private sector to various levels of government.

The BS-DSM program is composed of ten core courses and six electives offered in an accelerated one-month onsite format. As an introduction, students are offered a broad overview of security management, current issues in domestic security, and the culture and politics of terrorists. The remaining six courses expose the student to direct management strategies for emergencies including leadership and ethics. Together these courses provide a theoretical and practical foundation for managing emergencies.

## **Program Outcomes**

At the completion of the BS-DSM program, students will possess the knowledge and skills needed to actively participate in writing preemergency plans, assist with the decision making process during and after an emergency, and write after-action reports using the skills learned in the capstone course.

Specifically, by the end of this program, students will be able to:

- Demonstrate undergraduate level written communications skills.
- Demonstrate undergraduate level oral communications skills.
- Apply analytical and critical thinking skills.
- Conduct independent research and apply relevant criticism in sustained analysis and interpretations of security management thinking.
- Engage in informed critical discussion, both oral and written, pertaining to domestic security management.
- Engage in informed critical discussion, both oral and written, of past breeches of security within the United States.
- Evaluate, both oral and written, emergency disaster pre-plans, recovery plans, and after-action reports.
- Apply analytical skills in approaching ethical dilemmas faced in government and private industry.
- Identify the ethical implications of technology's convergence on management.
- Describe, both oral and written, the political and religious implications of the terrorist climate.

## **Degree Requirements**

To earn a Bachelor of Science with a major in domestic security management, students must complete at least 180 quarter units as described below. 76.5 quarter units must be completed at the upperdivision level and 45 must be completed in residence at National University. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

## **Requirements for the Major**

(10 courses; 45 quarter units)

| DSM 401 Survey of Domestic Security Management | DSM 401 | Survey of Domestic Security Management |
|--|---------|--|
|--|---------|--|

- CJA 446 Criminal Justice Management and Leadership
- CJA 467 International and Domestic Terrorism
- DSM 420 Information Security
- DSM 430 Land Borders, Seaports, and Airport Security
- DSM 440 Crisis Response Planning and Management
- DSM 444 Disaster Management
- DSM 470 Legal Issues of Security Management
- DSM 475 Techniques of Interviewing and Interrogation
- DSM 490 Supervised Senior Project\* (Prerequisite: Students must have satisfied at least 27 quarter units of coursework in the major prior to beginning this course.)

## The Supervised Senior Project

The Supervised Senior Project is designed to be a comprehensive project. Therefore, students should schedule DSM 490 toward the end of their degree program. The minimum requirements are the completion of at least 27 quarter units of the major requirements in the DSM program.

To complete the project satisfactorily, students apply extensive effort in research and writing over a period of two months. Due to the time and effort required for this project, it is recommended that students dedicate themselves to the completion of this project without academic distraction.

\*Students who do not complete the Supervised Senior Project within the two-month period are eligible, at the discretion of the instructor, to receive a grade of "IP" with a maximum of a one-time six month extension. Students who do not complete the project at the end of the extension period will need to retake DSM 490. No grade of "I" (Incomplete) can be given for this course.

## **Upper-Division Electives**

(6 courses; 27 quarter units)

Students can select any six of the courses listed below to complete this requirement

CJA 434 Survey of Forensic Sciences CJA 456 Criminal Evidence CIA 400 Gangs in America CJA 457 Minorities, Crime and Social Justice CJA 440 Corrections COM 380 Democracy in Information Age (Prerequisites: ENG 100/101) MGT 422 Team Building, Interpersonal Dynamics and Empowerment MGT 409C Principles of Management and Organization HUB 420 Human Communications (Prerequisites: ENG 100/101, PSY 100) Principles of Investigation CJA 460

## Major in Environmental Science and Policy

## (620-123)

Faculty Advisor: Dzung T. Nguyen • (858) 642-8467 • dnguyen@nu.edu

The Bachelor of Science in Environmental Science and Policy degree explores the complex relationships between atmospheric, hydrologic, geological, and ecological systems and human activities in a systematic way. This is accomplished by examining these interactions from a variety of perspectives, including the social sciences, the humanities, and the natural sciences.

The B.S. in Environmental Science and Policy degree provides excellent training for careers with agencies responsible for environmental protection and natural resources use, consulting firms, and those seeking opportunities for graduate studies.

## Program Outcomes

Upon completing the B.S. in Environmental Science and Policy, students will be able to examine environmental issues from an interdisciplinary perspective. They should be able to:

- Describe the scientific principles that underlie the dynamics and energy flow within natural ecosystems.
- Recognize the role of biogeochemical, climatological, and geological cycles such as the current late Pleistocene conditions which impact climate, resources, land use and management, economic conditions, extinctions, global warming, and cooling, etc.
- Identify the social, historical, economic, and political factors that have shaped our present-day environmental problems.
- Know the constraints for dealing with the above problems.
- Recognize the roles of philosophy, religion, and ethics in shaping human's interaction with the natural surroundings.
- Identify the factors that influence the emergence of the environmental movement and the codification of environmental laws.
- Evaluate the impact of environmental policy on the quality of life.

Students who have completed the major will also be able to appreciate and examine a problem at a variety of scales, from local to global. Finally, through their work in the capstone seminar course, they will have had the practical experience of working on a few focus issues in a collaborative way, simulating the real-world giveand-take-among parties with different interests and perspectives on environmental questions.

The College of Letters and Sciences is committed to the complete academic development of its students. Consequently, where practical, all mathematics and science courses are writing-intensive and incorporate a diversity component. Please note that all mathematics and science courses contain a critical thinking component by their very nature.

## **Degree Requirements**

To receive a Bachelor of Science in Environmental Sciences and Policy degree, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

To prepare for a major in Environmental Science and Policy, students must demonstrate proficiency in the fundamental concepts of life

sciences, earth sciences, and mathematics through successful completion of the following courses. Some of these courses may also be used to satisfy general education requirements.

## Preparation for the Major

(12 courses; 45 quarter units)

| SCI 100  | Survey of Bioscience*                                     |
|----------|---|
| SCI 100A | Survey of Bioscience Laboratory (1.5 quarter units)*      |
|          | (Prerequisite: SCI 100)                                   |
| SCI 101  | Introduction to Chemistry*                                |
|          | (Recommended: Prior completion of MTH 204 or MTH          |
|          | 215 or MTH 216A/B)  |
| SCI 101A | Introduction to Chemistry Laboratory (1.5 quarter units)* |
|          | (Prerequisite: SCI 101)                                   |
| SCI 103  | Fundamentals of Geology*                                  |
| SCI 103A | Fundamentals of Geology Laboratory (1.5 quarter units)*   |
|          | (Prerequisite: SCI 103)                                   |
| COM 200  | Effective Communication*                                  |
| SCI 300  | Geography: Mapping the World*                             |
| CIS 301  | Management Info Systems                                   |
| COM 422  | Technical Writing and Presentation                        |
|          | (Prerequisite: ENG 334A)                                  |
| MTH 210  | Introduction to Probability and Statistics*               |
|          | (Prerequisites: Placement Evaluation)                     |
| MTH 215  | College Algebra and Trigonometry*                         |
|          | (Prerequisite: Placement Evaluation)                      |
| or       |   |
| MTH 216A | College Algebra and Trigonometry I*                       |
|          | (Prerequisite: Placement Evaluation)                      |
| and      |   |
| MTH 216B | College Algebra and Trigonometry II*                      |
|          | (Prerequisite: Placement Evaluation)                      |
|          |   |

\*May be used to satisfy general education requirements.

## **Requirements for the Major**

(12 courses; 54 quarter units)

| MTH 317  | Mathematical Modeling   |
|----------|---|
| SCI 303  | ( <i>Prerequisites: MTH 215 or MTH 216A/B and MTH 210</i> )<br>Introduction to Geographic Information Systems (GIS) |
|          | and Remote Sensing in Natural Resources.  |
| SCI 330  | Ecology   |
| SCI 322  | Oceanography  |
| SCI 335  | Environmental Science   |
| SCI 336  | Natural Resources, Conservation, Economics, and Policy  |
| SCI 337  | Environmental Law, Policy and Sustainability  |
| PHL 375  | Environmental Ethics  |
|          | (Prerequisites: ENG 100/101)  |
| SCI 411  | Biodiversity  |
|          | (Recommended: prior completion of SCI 100 and 100A,   |
|          | or equivalent)  |
| SCI 491A | Senior Seminars and Capstone Project in Environmental   |
|          | Studies I   |

(Select a seminar series from the following list)

- A. Wildlife Management
- B. Desert /Xeric Watershed Management
- C. Riparian Ecology and Management
- D. Waste Water Management
- E. Environmental Impact Report (EIR) process and preparation
- F. Urban Open Space Management (canyons, vernal pools, housing corridors, etc.)
- G. Land use, zoning, development and mitigation process
- H. GIS/ Remote Sensing/ Electronic Tracking Data bases
- SCI 491B Senior Seminars and Capstone Project in Environmental Studies II

(Select a seminar series from the following list. It must be a different topic from the one in SCI 491A)

- A. Wildlife Management
- B. Desert /Xeric Watershed Management
- C. Riparian Ecology and Management
- D. Waste Water Management
- E. Environmental Impact Report (EIR) process and preparation
- F. Urban Open Space Management (canyons, vernal pools, housing corridors, etc.)
- G. Land use, zoning, development and mitigation process
- H. GIS/ Remote Sensing/ Electronic Tracking Data bases
- SCI 492 Agency Internship/Project in Environmental Science and Policy

## **Upper-Division Electives**

(2 courses; 9 quarter units)

Students may select only 300-, 400-, or 500-level courses in the College of Letters and Sciences to complete the total of 76.5 upperdivision units for the degree. Some of the suggested upper-division courses are:

| ENG 375  | Nature Writing   |
|----------|--|
|          | (Prerequisites: ENG 100/101)                                     |
| SCI 405  | Introduction to Cell and Molecular Biology                       |
|          | (Recommended: prior completion of SCI 100 & 100A, or equivalent) |
| and      |  |
| SCI 405A | Introduction to Cell and Molecular Biology Laboratory            |
|          | (1.5 quarter units)  |
|          | (Prerequisite: SCI 405)  |
| SCI 450  | Natural History of California: A Field Course                    |
| PHL 336  | Philosophy of Science  |
|          | (Prerequisites: ENG 100/101)                                     |
| GLS 420  | Ecological Revolutions: Economics, Technology and the            |
|          | Global Environment   |
|          | (Prerequisite: ENG 240)  |
|          | -  |

## Major in Mathematics<sup>®</sup>

## (620-105)

Faculty Advisor: Igor Subbotin • (310) 662-2150 • isubboti@nu.edu

The Bachelor of Science in Mathematics provides a strong foundation in mathematics and its applications. Designed to help address our nation's increasing need for mathematical scientists, technicians and especially teachers, the program emphasizes reflective and conceptual understanding and technique.

First, it provides the fundamental mathematical knowledge to formulate and solve problems in industry and research (concentration in mathematics and applications). Computer science courses are encouraged, since the use of computers has been instrumental in the expansion of these opportunities. Students who want a basic mathematics degree can culminate their program with the project courses.

Second, the program trains mathematics teachers who want to provide quality mathematical instruction to students in primary or secondary schools. The single-subject teaching concentration was created for this purpose.

The Department of Mathematics and Natural Sciences is committed to the complete academic development of its students. Consequently, where practical, all mathematics and science courses are writingintensive and incorporate a diversity component. Students are advised that all mathematics courses encourage critical thinking by their very nature. Moreover, all mathematics courses require that the student purchase and use a scientific calculator for the operations of the subject matter. Some courses require a more advanced graphing calculator and computer software. The program includes two concentrations.

- he concentration in mathematics and applications provides students with the fundamental mathematical knowledge to formulate and solve problems in industry and research.
- The single-subject teaching concentration was created to train mathematics teachers who want to provide quality mathematical instruction to students in secondary schools.

## Single-Subject Mathematics Preparation Program

The Single-Subject Mathematics Preparation Program is approved by the Commission on Teacher Credentialing. Students who complete the program with the Concentration in Single Subject Teaching will not be required to take the California Subject Examination for Teachers (CSET) in mathematics in order to receive their teaching credential. The program emphasizes a strong foundation in mathematical content together with activities designed to help future teachers assume leadership roles in an increasingly complex educational world.

Interested students should complete the following application process:

- Send a letter to the Department Chair requesting admission to the program and copies of transcripts to the Lead Mathematics Faculty for evaluation.
- Upon enrollment, submit two essays for the Mathematics Portfolio (Instructions for the development and completion of a Mathematics Portfolio are sent upon receipt of the request letter. The portfolio is completed for review by the Department Chair or Lead Faculty two months before the last class.)
- After completing the major program requirements, students must complete all required courses from the single-subject teaching concentration (MTH 304, MTH 410, MTH 460, MTH 461, MTH 450A).

The study of mathematics must encompass the discipline in its broadest sense. The future mathematician should develop in an academic environment that stresses scholarship, diversity, and growth through a rigorous and focused curriculum of advance mathematics that incorporates: problem solving, mathematics as communication, reasoning, and mathematical connections. The Bachelor of Science in Mathematics program is dedicated to providing such sound preparation and training to a diverse population of nontraditional learners whose goal is to work professionally in mathematics or teach Mathematics in California public schools.

## Program Outcomes

Upon completion of this program, students will be able to:

- Experience, master, and apply skills and knowledge in problem solving. Using appropriate mathematical models students will be able to examine given situations, extract quantitative information, formulate and solve mathematical problems described these situations.
- Use language and mathematical symbols to communicate mathematical ideas. They will be able to communicate mathematical concepts clearly and effectively using graphs, formulas, tables, computer technology, and graphing calculators, using appropriate mathematical symbols and notions.
- Demonstrate a variety of reasoning skills. They will develop their ability to reason inductively and deductively, test conjectures, construct counter-examples, make valid arguments, and judge the validity of mathematical arguments, apply a variety of reasoning processes such as spatial, probabilistic, and

proportional process, evaluate the reasonableness of solutions to problems.

- Investigate the connections and interplay among various mathematical topics and their applications that cover range of phenomena across appropriate disciplines.
- Use current technology tools, such as computers, calculators, graphing utilities, video, and interactive programs, that is appropriate for the research and study in mathematics.
- Be able to have an understanding of the classic and modern algebra as a fundamental language through which mathematics is communicated. They will have deep knowledge in abstract, linear, and matrix algebra.
- Have a fundamental knowledge of geometry. They will translate between synthetic and coordinate representations, understand axiomatic systems, master in Euclidian and non-Euclidean geometries, apply geometry to the real world problems.
- Be able to model real world problems with a variety of algebraic and transcendental functions, to translate between the tabular, symbolic, and graphical representation of functions, master in the main concepts of calculus, including the derivative, integral, differential equations, their interconnections, and their use in analyzing and solving real-world problems.
- Understand the beauty of pure number theory, including such advanced topics as diophantine equations, number-theoretic functions, quadratic reciprocity, primitive roots, and continued fractions. They will be able to discuss errors in numerical computation, use function approximation, polynomial interpolation, cubic spline interpolations, quadratures, numerical differentiation, and so on.
- Use advanced statistics and probability concepts and methods to analyze and study different real-world problems.

## Degree Requirements

To receive a Bachelor of Science in mathematics degree, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level. In the absence of transfer credit, students may need to take additional general electives to satisfy total units for the degree. Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

## Preparation for the Major

(7 courses; 31.5 quarter units)

| MTH 210 | Introduction to Probability and Statistics*      |
|---------|--|
|         | (Prerequisites: Placement Evaluation)            |
| CSC 242 | Introduction to Programming Concepts and Methods |
|         | (Prerequisites: CSC 200 and CSC 208)             |
| SCI 102 | Survey of Physical Sciences*                     |
| MTH 220 | Calculus I*                                      |
|         | (Prerequisite: MTH 215, or placement evaluation) |
| or      |  |
| CSC 208 | Calculus for Computer Science I*                 |
|         | (Prerequisite: Math 215)                         |
| MTH 221 | Calculus II                                      |
|         | (Prerequisite: MTH 220)                          |
| MTH 222 | Calculus III                                     |
|         | (Prerequisite: MTH 221)                          |
| MTH 223 | Calculus IV                                      |
|         | (Prerequisite: MTH 222)                          |
|         |  |

\*May be used to satisfy general education requirements.

## **Requirements for the Major**

(12 courses; 54 quarter units)

MTH 311 Topics from Geometry (Prerequisites: MTH 215 or placement evaluation)

| MTH 317 | Mathematical Modeling<br>(Prerequisites: MTH 215 or MTH 216A/B and MTH 210) |
|---------|---|
| MTH 325 | Discrete Structures and Logic Design  |
|         | (Prerequisites: MTH 215 or MTH 216A/B or placement evaluation)              |
| or      |   |
| CSC 331 | Discrete Structures and Logic   |
|         | (Prerequisites: CSC 252, CSC 310)   |
| MTH 435 | Linear Algebra  |
|         | (Prerequisites: MTH 325 and MTH 220)  |
| MTH 433 | Differential Equations  |
|         | (Prerequisite: MTH 223 and MTH 435)   |
| MTH 411 | Number Theory   |
|         | (Prerequisite: MTH 215 or MTH 216A/B or MTH 301 or                          |
|         | placement evaluation)   |
| MTH 416 | Algebraic Structures  |
|         | (Prerequisites: MTH 325 and MTH 435)  |
| MTH 417 | Foundation of Geometry  |
|         | (Prerequisites: MTH 215 or MTH 216 A/B and MTH 311)                         |
| MTH 418 | Statistical Analysis  |
|         | (Prerequisites: MTH 210 and MTH 220)  |
| MTH 432 | Advanced Calculus   |
|         | (Prerequisites: MTH 223)  |
| MTH 412 | History of Mathematics  |
|         | (Prerequisites: MTH 215, MTH 216A/B, or MTH 301)                            |
| MTH 438 | Applied Mathematical Modeling (core capstone course)                        |
|         | (Prerequisites: MTH 433, MTH 416, and MTH 432)                              |
|         |   |

### Additional Requirement for Single Subject Teaching Concentration

(1 course; 4.5 quarter units)

MTH 304 Mathematics Practicum and Portfolio Project (Prerequisites: MTH 215 or MTH 216 A/ B or placement evaluation, which should be taken as early in the program as possible.)

#### **Upper-Division Concentration Requirements**

(4 courses; 18 quarter units)

# ▲ Concentration in Mathematics and Applications

(172)

Students must successfully complete the following courses for a concentration in mathematics and applications. It is recommended that students take these classes at or near the end of their program after completing the upper-division major requirements.

| MTH 440  | Numerical Analysis   |
|----------|--|
|          | (Prerequisite: MTH 220)                                      |
| MTH 441  | Abstract Algebra with Applications                           |
|          | (Prerequisite: MTH 416)                                      |
| MTH 442  | Functions of Complex Variables and its Applications          |
|          | (Prerequisite: MTH 223)                                      |
| MTH 450A | Mathematics Project Course I                                 |
|          | (Prerequisites: All core requirements for mathematics major) |
|          |  |

# ▲ Concentration in Single-Subject Teaching (173)

Students must successfully complete the following courses for a concentration in single-subject teaching. It is recommended that students take these classes at or near the end of their program after completing the upper-division major requirements.

MTH 410 Computer Technology in the Mathematics Classroom (Prerequisite: MTH 215 or MTH 216A/B or MTH 301)

| MTH 460  | Problem Solving Strategy                                     |
|----------|--|
|          | (Prerequisites: MTH 416 and MTH 417)                         |
| MTH 461  | Methods of Teaching of Mathematics                           |
|          | (Prerequisites: MTH 311, MTH 325, MTH 412, MTH 460)          |
| MTH 450A | Mathematics Project Course I                                 |
|          | (Prerequisites: All core requirements for mathematics major) |
|          |  |

Students must complete the major for a BS in Mathematics and complete an interview with the department chair before taking a project course. Students can select additional electives from any other upper-division courses.

# Major in Natural Sciences

(620-109-212 Life Science Concentration) (620-109-213 Earth Science Concentration) Faculty Advisor: Michael Maxwell • (858) 642-8413 • mmaxwell@nu.edu

The Bachelor of Science in Natural Sciences degree provides a foundation in the earth and life sciences. This major is designed to serve the needs of students who plan to teach at elementary or secondary level(s), and is also useful for those preparing for careers in science education, health sciences, or in science-related business, engineering, technology, or social services fields. Each student chooses a Concentration within the Major: Life Science or Earth Science.

Students who wish a broad, interdisciplinary approach should look closely at the benefits provided by this major. In addition to meeting requirements for a bachelor of science degree, it provides moderate intensification in one field of science without sacrificing an interdisciplinary approach and training in mathematics and science. Natural Science majors are not eligible for a double major in mathematics or any of the component sciences in the program.

The College of Letters and Sciences is committed to the complete academic development of its students. Consequently, where practical, all science and mathematics courses are writing-intensive and incorporate a diversity component. All mathematics and science courses contain a critical thinking component by their very nature.

#### **Program Outcomes**

Upon completion of the program, students will be able to:

- Develop an integrated overview of the diverse fields of human knowledge in the life and physical sciences.
- Demonstrate an ability to make interdisciplinary conceptual linkage across the scientific disciplines, e.g., evolution, plate tectonics/biogeography, ecosystems, genetics/heredity.
- Demonstrate the critical thinking skills essential to scientific inquiry and research protocols.
- Demonstrate an increased respect for the awareness of the geological and geographical processes of the planet, the biodiversity of the planet, and the responsible role(s) humankind must play.
- Demonstrate fundamental knowledge of major conceptual models in the fields of life and physical sciences, global geography, and mathematics.
- Demonstrate competence in communication (oral and written) and quantitative skills, including the critical analysis of data and argument.
- Mastery of laboratory-based and field based scientific inquiry.
- Demonstrate basic computer/technology literacy including the ability to access databases within the context of course research and project development.
- Demonstrate knowledge of contemporary research in the life and physical sciences, adequate for teaching basic sciences in middle and high school.
- Demonstrate the ability to critically review current research

topics/problems and determine those that are best approached on an interdisciplinary basis.

 Develop a heightened awareness of the historical perspective each of the scientific disciplines within the natural sciences.

#### **Degree Requirements**

To receive a Bachelors of Science in Natural Sciences degree, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, and 76.5 of which must be completed at the upper-division level. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

After completing the Preparation for the major and requirements for the major courses; each student chooses a Concentration: Life Science or Earth Science.

#### Preparation for the Major

(10 courses; 33 quarter units)

| MTH 210  | Introduction to Probability and Statistics*                               |  |
|--|---|--|
| MTH OID  | (Prerequisite: Placement Evaluation)                                      |  |
| MTH 215  | College Algebra and Trigonometry*<br>(Prerequisite: Placement Evaluation) |  |
| or   | (Frerequisite. Fucement Louinution)                                       |  |
|  | College Algebra and Trigonometry I*                                       |  |
|  | (Prerequisite: Placement Evaluation)                                      |  |
| and  | (=)   |  |
| MTH 216B   | College Algebra and Trigonometry II*                                      |  |
|  | (Prerequisite: Placement Evaluation)                                      |  |
| SCI 100  | Survey of Bioscience*   |  |
| SCI 100A   | Survey of Bioscience Laboratory (1.5 quarter units)*                      |  |
|  | (Prerequisite: SCI 100)   |  |
| SCI 101  | Introduction to Chemistry*  |  |
|  | (Recommended: Prior completion of MTH 204 or MTH                          |  |
|  | 215 or MTH 216A/B)  |  |
| SCI 101A   | Introduction to Chemistry Laboratory (1.5 quarter                         |  |
|  | units)*   |  |
| 0.01 100   | (Prerequisite: SCI 101)   |  |
| SCI 103  | Fundamentals of Geology*  |  |
| SCI 103A   | Fundamentals of Geology Laboratory(1.5 quarter units)*                    |  |
| 0.01.404   | (Prerequisite: SCI 103)   |  |
| SCI 104  | General Physics*  |  |
|  | (Prerequisite: two years of high school algebra and MTH 204               |  |
| 0.07.4044  | or 215 or 216A/B)   |  |
| SCI 104A   | General Physics Laboratory(1.5 quarter units)*                            |  |
| * ) ( 1  | (Prerequisite: SCI 104)   |  |
| * May be used to meet General Education requirements |   |  |

#### **Requirements for the Major**

(10-11 courses; 43.5-45 quarter units)

Core requirements for all Natural Science majors) (5 courses; 22.5 quarter units)

| MTH 317 | Mathematical Modeling                                       |
|---------|---|
|         | (Prerequisites: MTH 210 and MTH 215 or MTH 216A/B)          |
| SCI 330 | Ecology   |
| SCI 335 | Environmental Science                                       |
| SCI 400 | History of Science  |
|         | (Prerequisite: One 4.5 quarter unit course from the natural |
|         | sciences)   |
| SCI 411 | Biodiversity  |
|         | (Recommended: prior completion of SCI 100 and 100A          |
|         | or equivalent)  |

#### **Option 1: Life Science Concentration**

(6 courses; 21 quarter units)

| SCI 405                               | Introduction to Cell and Molecular Biology                       |
|---------------------------------------|--|
|                                       | (Recommended: prior completion of SCI 100 & 100A, or equivalent) |
| SCI 405A                              | Introduction to Cell and Molecular Biology Laboratory            |
| 5CI 405A                              | 6, ,   |
|                                       | (1.5 quarter units)  |
|                                       | (Prerequisite: SCI 405)  |
| SCI 408                               | Introduction to Genetics and Heredity                            |
|                                       | (Recommended: prior completion of SCI 100 & 100A, or             |
|                                       | equivalent)  |
| SCI 412                               | General Zoology  |
|                                       | (Recommended: prior completion of SCI 100 & 100A, or             |
|                                       | equivalent)  |
| SCI 412A                              | General Zoology Laboratory (1.5 quarter units)                   |
|                                       | (Prerequisite: SCI 412)  |
| SCI 420                               | Animal Behavior  |
| 001 120                               |  |
|                                       |  |
| Option 2: Earth Science Concentration |  |
|                                       |  |

(5 courses; 22.5 quarter units)

| SCI 301 | Earth and Planetary Sciences                           |
|---------|--|
| SCI 303 | Introduction to Geographic Information Systems (GIS)   |
|         | and Remote Sensing in Natural Resources                |
| SCI 322 | Oceanography   |
| SCI 336 | Natural Resources, Conservation, Economics, and Policy |
| SCI 450 | Natural History of California: A Field Course          |
|         | -  |

#### Upper-Division Electives (all Natural Science majors)

(For Option 1: Life Sciences -6 courses; 27 quarter units) (For Option 2: Earth Science – 7 courses; 31.5 quarter units) Students may select only 300-, 400-, or 500-level in the College of Letters and Sciences to complete the total of 76.5 units for the degree.

### Major in Organizational Behavior

(620-110)

Faculty Advisor: Lou Ellen Sherrill • (310) 662-2138 • lsherrill@nu.edu

The behavior of individuals and groups in an organization directly affects the success of the organization. Knowledge of human behavior, psychology and business is critical in helping people lead productive lives and contribute to the achievement of organizational goals and objectives. The Bachelor of Science in Organizational Behavior provides a solid foundation for applying knowledge to the workplace and increasing the effectiveness of both individuals and work teams.

#### **Program Outcomes**

The primary program outcomes and competencies are:

- The ability to write a comprehensive paper that covers the empirical and theoretical study of a specific topic related to the major.
- Knowledge of ethics, responsibility, and legal obligations and apply these principles to personal and professional situations.
- Competency in applying group psychology and group dynamics to team building and cooperative/collaborative tasks.
- Knowledge of human resource development and training as applied to organizational effectiveness, performance management, motivation, and achieving individual, group, and organizational goals.
- Competency in knowledge of the history and precursors of organizational theory and management practice from a psychological perspective.
- Mastery of skills and techniques in diagnosing, planning, implementing, and managing organizational change and

technological innovation.

- Mastery of human communication and conflict resolution skills.
- Sensitivity to diversity issues and an awareness of multicultural perspectives.
- Mastery of research methods for the collection and statistical interpretation of behavioral and organizational data.

#### **Degree Requirements**

To receive a Bachelor of Science in Organizational Behavior, students must complete at least 180 quarter units as articulated below, 76.5 of which must be completed at the upper-division level and 45 of which must be completed in residence at National University. In the absence of transfer credit additional general electives may be needed to fulfill the total unit requirement for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

#### **Requirements for the Major**

(9 courses; 40.5 quarter units)

| HUB 440  | Organizational Development                                  |
|----------|---|
|          | (Prerequisites: ENG 100/101 and PSY 100)                    |
| HUB 410  | Psychology for Managers                                     |
|          | (Prerequisites: ENG 100/101 and PSY 100)                    |
| HUB 500  | Cross-Cultural Dynamics of Human Behavior                   |
|          | (Prerequisites: ENG 100/101 and PSY 100)                    |
| MGT 422  | Team Building, Interpersonal Dynamics, and                  |
|          | Empowerment   |
| or       |   |
| HUB 400  | Group Structure and Dynamics                                |
|          | (Prerequisites: ENG 100/101 and PSY 100)                    |
| HRM 409B | Survey in Human Resources Management and                    |
|          | Organizational Development                                  |
| or       |   |
| PSY 432  | Social Psychology   |
|          | (Prerequisites: ENG 100/101 and PSY 100)                    |
| MGT 400  | Ethics in Law, Business, and Management                     |
| HUB 401  | Conflict Resolution   |
|          | (Prerequisites: ENG 100/101 and PSY 100)                    |
| or       |   |
| HUB 420  | Human Communication   |
|          | (Prerequisites: ENG 100/101 and PSY 100)                    |
| PSY 435  | Analysis of Data in Psychological Research                  |
|          | (Prerequisites: ENG 100/101, PSY 100 and MTH 210)           |
| PSY 480  | Senior Project  |
|          | (Prerequisite: Completion of all other core courses for the |
|          | major)  |

#### **Upper-Division Electives**

(7 courses; 31.5 quarter units)

Students can select from the following course prefixes to meet elective requirements: HUB, PSY, SOC, CJA, HCA, HRM, MGT, and COM.

# Major in Paralegal Studies

#### (620-488)

Director, Paralegal Studies: Marlene Amera Alhandy • (310) 662-2115 • malhandy@nu.edu

This degree is housed within the College of Letters and Sciences in the Department of Professional Studies (in partnership with Extended Learning). The department chair, program director, and lead faculty provide the academic oversight for this program with the academic reporting relationship to the Office of the Senior Vice President for Academic Affairs.

Degree and transcript to be conferred by the College of Letters and Sciences.

The academic unit certificates are housed and offered through the National University System Extended Learning Division, reporting to the Vice President of Extended Learning.

The Bachelor of Science in Paralegal Studies program is intended to provide students with the legal skills required to serve the community ethically and efficiently. The program provides an academic and practical education of uncompromising quality, and is designed through its curriculum to enable students to understand and articulate legal theory and apply it ethically to legal professional practice.

#### **Program Outcomes**

By the end of this program, the student will be able to demonstrate competency in the following areas:

- Learning legal terminology;
- Understanding paralegalism as a profession;
- Understanding legal theory and practice;
- Developing legal research skills through online computer programs;
- Developing manual legal research skills through library usage;Developing oral communication skills;
- Developing oral communication skills;
- Developing whiteli communication skins,
  Developing the ability to recognize legal issues;
- Developing the ability to recognize legal issue;
   Developing the ability to analyze legal issues;
- Developing the ability to analyze legal issues;
   Developing the ability to analyze legal issues;
- Developing the ability to apply the proper legal remedies;
  Developing analytical tools within an ethical framework;
- The ability to integrate theory and practice.

#### **Degree Requirements**

To receive a Bachelor of Science in Paralegal Studies, students must complete 180 quarter units. Students must meet the general education requirements described in this catalog. For the major in paralegal studies, students must complete 76.5 quarter units of upper-division coursework and 45 quarter units must be completed in residence at National University. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree.

Note: No person shall practice law in California unless the person is an active member of the State Bar.

#### **Requirements for the Major**

(10 courses; 45 quarter units)

PLA 301 Legal Theory and Ethics PLA 303 Law Office Administration PLA 305 Property PLA 306 Torts PLA 308 Contracts PLA 309 Directed Research and Writing A PLA 310 Directed Research and Writing B PLA 425 Litigation I PLA 318 Remedies and Judgments PLA 324 English for Professionals

#### **Specialty Concentrations**

#### (4 courses; 18 quarter units)

(3 courses; 13.5 quarter units, for students choosing Litigation)

All students must take two of the two-course concentrations listed below. Students must take the level I and level II courses for each area. Because Litigation I is required in the major, students who select Litigation II will be required to take an additional elective.

PLA 407 Family Law I PLA 421 Family Law II

(Prerequisites: ENG 100/101)

PLA 426 Litigation II (Prerequisite: PLA 425) Probate and Estate Planning I PLA 427 PLA 428 Probate and Estate Planning II (Prerequisite: PLA 427) PLA 429 Corporations I PLA 430 Corporations II (Prerequisite: PLA 429) Real Estate I PLA 431 Real Estate II PLA 432 (Prerequisite: PLA 431) PLA 433 Criminal Law I PLA 434 Criminal Law II

#### **Elective Courses**

(3 courses; 13.5 quarter units)

(4 courses; 18 quarter units, for students who choose the Litigation concentration)

- PLA 302 Computers and the Law
- PLA 404 Wills, Trusts, and Estate Planning
- PLA 407 Family Law I
- PLA 421 Family Law II
- PLA 311 Internship
- PLA 413 Juvenile Law and Procedure
- PLA 314 Workers' Compensation PLA 315 Bankruptcy Law and Procedure
- PLA 316 Entertainment Law
- PLA 317 Immigration Practice
- PLA 433 Criminal Law I
- PLA 434 Criminal Law II
- PLA 335 Employment Law

# Foreign Credential Bridge Program (for

#### **Students with Foreign Credentials)**

The Foreign Credential Bridge Program (FCBP) is designed as a prequalifying year of undergraduate study for students who have earned a recognized three-year bachelor's degree outside of the United States and who wish to earn a master's degree from National University. Students with such foreign credentials who apply to a master's program must complete this fourth year of undergraduate courses prior to beginning graduate level coursework. Eligibility for the FCBP is made by the office of the Registrar. Students must request a pre-evaluation of their foreign credentials through an Admissions Advisor or through the International Programs Office (for those with student visas.)

#### **Degree Requirements**

This bridge program requires a residency minimum of 48 quarter units of study. Students must fulfill the requirements in the areas listed below. These requirements may be met by coursework taken in the bachelor's degree or at another regionally accredited institution. If they are so fulfilled, the content of the area will be waived, but the student will still need to meet the overall unit requirement of the program through open elective credit.

#### AREA A: ENGLISH COMMUNICATION

(15 quarter units required)

#### **CATEGORY 1: Writing**

(10.5 quarter units required)

| ENG 100 | Effective College English I (3 quarter units)  |
|---------|--|
|         | (Prerequisite: Placement Exam)                 |
| ENG 101 | Effective College English II (3 quarter units) |
|         | (Prerequisite: ENG 100)                        |
| ENG 240 | Advanced Composition                           |

(No 300-level English course may fulfill this requirement) ENG 334A Technical Writing

Letters and Sciences

### (Prerequisites: ENG 100/101)

#### **CATEGORY 2: Speech and Communications**

(4.5 quarter units required)

or

COM 100 Introduction to Communications COM 200 Effective Communication

#### AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

| MTH 210  | Introduction to Probability and Statistics            |
|----------|---|
|          | (Prerequisite: Placement Evaluation)                  |
| MTH 215  | College Algebra and Trigonometry                      |
|          | (Prerequisite: Placement Evaluation)                  |
| MTH 216A | College Algebra and Trigonometry I (3 quarter units)  |
|          | (Prerequisite: Placement Evaluation)                  |
| MTH 216B | College Algebra and Trigonometry II (3 quarter units) |
|          |   |

# AREA D: ARTS AND HUMANITIES

(Prerequisite: MTH 216A)

(13.5 quarter units required)

| ART 100  | Introduction to Art History<br>(Prerequisites: ENG 100/101) |
|----------|---|
| ART 200  | Visual Arts   |
| ART 200A | , , , , , , , , , , , , , , , , , , ,                       |
|          | (Prerequisite: ART 200)                                     |
| HIS 233  | World Civilization I  |
|          | (Prerequisites ENG 100/101)                                 |
| HIS 234  | World Civilization II                                       |
|          | (Prerequisites ENG 100/101)                                 |
| LIT 100  | Introduction to Literature                                  |
|          | (Prerequisites: ENG 100/101)                                |
| LIT 345  | Mythology   |
|          | (Prerequisite: LIT 100)                                     |
| MUS 100  | Fundamentals of Music                                       |
| MUS 327  | World Music   |
|          | (Prerequisites: ENG 100/101                                 |
| PHL 100  | Introduction to Philosophy                                  |
|          | (Prerequisites: ENG 100/101)                                |
|          |   |

## AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(13.5 quarter units required)

COM 380 Democracy in the Information Age [+] (Prerequisites: ENG 100/101) ECO 203 Principles of Microeconomics ECO 204 Principles of Macroeconomics History of the United States I [+] **HIS 220A** (Prerequisites: ENG 100/101) HIS 220B History of the United States II [+] (Prerequisite ENG 100/101) Foundations of Western Civilization HIS 300 (Prerequisite ENG 100/101) HIS 350 Cultural Diversity [+] (Prerequisites: ENG 100/101) POL 201 American Government and Politics (Prerequisites: ENG 100/101) PSY 100 Introduction to Psychology SOC 100 Principles of Sociology (+) (Prerequisites: ENG 100/101) SOC 260 Cultural Anthropology (Prerequisites: ENG 100/101)

#### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(6 quarter units required) (Note: One science lab is required at 1.5 quarter units.)

| SCI 100<br>SCI 100A | Survey of Bioscience<br>Survey of Bioscience Laboratory (1.5 quarter units) |
|---------------------|---|
|                     | (Prerequisite: SCI 100)   |
| SCI 101             | Introduction to Chemistry*  |
|                     | (Recommended: Prior completion of MTH 204 or MTH 215 or MTH 216A/B)         |
| SCI 101A            | Introduction to Chemistry Laboratory (1.5 quarter                           |
|                     | units)*   |
|                     | (Prerequisite: SCI 101)   |
| SCI 103             | Fundamentals of Geology   |
| SCI 103A            | Fundamentals of Geology Laboratory (1.5 quarter units)                      |
|                     | (Prerequisite: SCI 103)   |
| SCI 104             | General Physics*  |
|                     | (Prerequisite: two years of high school algebra and MTH 204                 |
|                     | or 215 or 216A/B)   |
| SCI 104A            | General Physics Laboratory(1.5 quarter units)*                              |
|                     | (Prerequisite: SCI 104)   |
| SCI 201             | Human Anatomy and Physiology I  |
|                     | (Recommended: prior completion of SCI 100 & 100A, SCI 101                   |
|                     | & 101A, or equivalent courses.)   |
| SCI 201A            | Human Anatomy and Physiology Laboratory I (1.5                              |
|                     | quarter units)  |
|                     | (Prerequisite: SCI 201)   |
| SCI 202             | Human Anatomy and Physiology II   |
|                     | (Recommended: prior completion of SCI 201 & 201A, SCI 100                   |
|                     | & 100A, SCI 101 & 101A, or equivalent courses.)                             |
| SCI 202A            | Human Anatomy and Physiology Laboratory II (1.5                             |
|                     | quarter units)  |
|                     | (Prerequisite: SCI 202)   |
| SCI 203             | Introduction to Microbiology  |
|                     | (Recommended: prior completion of SCI 201 & 201A, SCI 202                   |
|                     | & 202A, SCI 100 & 100A, SCI 101 & 101A, or equivalent                       |
|                     | courses.)   |
| SCI 203A            | Introduction to Microbiology Laboratory I (1.5 quarter                      |
|                     | units)  |

(Prerequisite: SCI 203)

# College of Letters and Sciences Minors

# Minor in Alternative Dispute Resolution

#### (482)

Faculty Advisor: Jack Hamlin • (858) 642-8405 • jhamlin@nu.edu

Although designed for those students majoring in business administration who may seek entry into the Alternative Dispute Resolution field, a minor in Alternative Dispute Resolution is available to all students in any bachelor's degree program. ADR is in high demand in the business community, local, state and federal governments, and neighborhood communities. The successful completion of the minor in ADR will provide students with the necessary skills to become effective negotiators, mediators, and facilitators and to promote peace and understanding between diverse cultures.

#### **Requirements for the Minor**

(6 courses; 27 quarter units)

- ADR 400 Alternative Dispute Resolution Processes
- ADR 405 Negotiation Fundamentals
- ADR 410 Facilitation Fundamentals ADR 415 Mediation Fundamentals

Choose any two of the following:

| ADR 420 | Communication and Conflict             |
|---------|--|
| ADR 425 | Cultural Issues in Conflict Management |
| ADR 430 | Ethics and Neutrality                  |

## Minor in Arabic Culture and History

#### (489)

Faculty Advisor: Mahmoud Al Dabbagh • (858) 642-8444 • mdabbagh@nu.edu

#### **Requirements for the Minor**

| (6 courses; 27 quarter units) |   |  |
|-------------------------------|---|--|
| SOC 327                       | Arabic Culture                                |  |
|                               | (Prerequisites: ENG 100/101)                  |  |
| HIS 339                       | History of the Middle East 600-1600           |  |
|                               | (Prerequisites: ENG 100/101)                  |  |
| HIS 342                       | Modern History of the Middle East             |  |
|                               | (Prerequisites: ENG 100/101)                  |  |
| PHL 332                       | Religion of Islam                             |  |
|                               | (Prerequisites: ENG 100/101)                  |  |
| POL 410                       | Middle Eastern Politics                       |  |
|                               | (Prerequisites: ENG 100/101)                  |  |
| LIT 315                       | Contemporary Arabic Literature in Translation |  |
|                               | (Prerequisite: LIT 100)                       |  |

### Minor in Arabic Studies

#### (488)

Faculty Advisor: Mahmoud Al Dabbagh • (858) 642-8444 • mdabbagh@nu.edu

#### **Requirements for the Minor**

(8 courses; 30 quarter units) (Required preparation for the minor: ARB 100/100A, ARB 101/101A, ARB 200/200A and FRA 201/201A)

FRA 300 Advanced Arabic I (Prerequisites: FRA 201/201A) (Co-requisite: FRA 300A) FRA 300A Advanced Arabic I Lab (1.5 quarter units) (Prerequisites: FRA 201/201A) (Co-requisite: FRA 300) FRA 301 Advanced Arabic II (Prerequisites: FRA 300/300A) (Co-requisite: FRA 301A) FRA 301A Advanced Arabic II Lab (1.5 quarter units) (Prerequisites: FRA 300/300A) (Co-requisite: FRA 301) FRA 400 Advanced Arabic Conversation (Prerequisites: FRA 301/301A)

Choose three courses from the following:

| SOC 327 | Arabic Culture                                |
|---------|---|
|         | (Prerequisites: ENG 100/101)                  |
| HIS 339 | History of the Middle East 600-1600           |
|         | (Prerequisites: ENG 100/101)                  |
| HIS 342 | Modern History of the Middle East             |
|         | (Prerequisites: ENG 100/101)                  |
| PHL 332 | Religion of Islam                             |
|         | (Prerequisites: ENG 100/101)                  |
| POL 410 | Middle Eastern Politics                       |
|         | (Prerequisites: ENG 100/101)                  |
| LIT 315 | Contemporary Arabic Literature in Translation |
|         | (Prerequisite: LIT 100)                       |

FRA 350 Fundamentals of Arabic Translation (Prerequisites: FRA 301/301A)

## Minor in Business Law

(483)

Faculty Advisor: Jack B. Hamlin • (858) 642-840 • jhamlin@nu.edu

#### **Requirements for the Minor**

(6 courses; 27 quarter units)

This minor is designed to provide students who have an interest in a career in law, business, or government, with an understanding of the complex legal issues that exist in today's business environment.

| LAW 400 | Current Legal Issues          |
|---------|-------------------------------|
| LAW 304 | Legal Aspects of Business I   |
| LAW 305 | Legal Aspects of Business II  |
|         | (Prerequisite: LAW 304)       |
| ADR 400 | Alternative Dispute Processes |
| ADR 405 | Negotiation Fundamentals      |
|         | 0                             |

Choose one from the following:

| Comparative International Law   |
|---------------------------------|
|                                 |
| Administrative Law for Business |
|                                 |
| Public Contracting              |
|                                 |

# • Minor in Chinese Culture and History

#### (503)

Faculty Advisor: Michael Day • (858) 642-8327 • mday@nu.edu

#### **Requirements for the Minor**

(6 courses; 27 quarter units)

| SOC 352 | Modern Chinese Culture                        |
|---------|---|
|         | (Prerequisites: ENG 100/101)                  |
| HIS 346 | Chinese History and Culture I                 |
|         | (Prerequisites: ENG 100/101)                  |
| HIS 355 | Chinese History and Culture II                |
|         | (Prerequisites: ENG 100/101)                  |
| PHL 326 | Chinese Thought                               |
|         | (Prerequisites: ENG 100/101)                  |
| POL 418 | Modern Economy and Government of Modern China |
|         | (Prerequisites: ENG 100/101)                  |
| LIT 310 | Chinese Literature in Translation             |
|         | (Prerequisite: LIT 100)                       |

### • Minor in Chinese Studies

(501)

Faculty Advisor: Michael Day • (858) 642-8327 • mday@nu.edu

#### **Requirements for the Minor**

(8 courses; 30 quarter units)

(Prerequisites for the minor are CHN 100/100A, CHN 101/101A, CHN 200/200A, FRC 201/201A)

| FRC 300  | Advanced Intermediate Chinese I                         |
|----------|---|
|          | (Prerequisites: FRC 201, FRC 201A)                      |
|          | (Co-requisite: FRC 300A)                                |
| FRC 300A | Advanced Intermediate Chinese I Lab (1.5 quarter units) |
|          | (Prerequisites: FRC 201, FRC 201A)                      |
|          | (Co-requisite: FRC 300)                                 |
| FRC 301  | Advanced Intermediate Chinese II                        |
|          | (Prerequisites: FRC 300, FRC 300A)                      |
|          | (Co-requisite: FRC 301A)                                |
| FRC 301A | Advanced Intermediate Chinese II Lab (1.5 quarter       |
|          | units)  |
|          | (Prerequisites: FRC 300, FRC 300A)                      |

|            | (Co-requisite: FRC 301)                |
|------------|--|
| FRC 400    | Advanced Chinese Conversation          |
|            | (Prerequisites: FRC 301, 301A)         |
| FRC 450    | Selected Readings in Modern Chinese    |
|            | (Prerequisites: FRC 301, 301A)         |
| Choose two | o courses from the following:          |
| SOC 352    | Modern Chinese Culture                 |
|            | (Prerequisites: ENG 100/101)           |
| HIS 346    | Chinese History and Culture I          |
|            | (Prerequisites: ENG 100/101)           |
| HIS 355    | Chinese History and Culture II         |
|            | (Prerequisites: ENG 100/101)           |
| PHL 326    | Chinese Thought                        |
|            | (Prerequisites: ENG 100/101)           |
| POL 418    | Economy and Government of Modern China |
|            | (Prerequisites: ENG 100/101)           |
| LIT 310    | Chinese Literature in Translation      |
|            | (Prerequisite: LIT 100)                |
|            |  |

### • Minor in Criminal Justice Administration<sup>®</sup>

#### (466)

Faculty Advisor: James Larson • (858) 642-8418 • jlarson@nu.edu

#### **Requirements for the Minor**

(6 courses; 27 quarter units)

The minor in criminal justice administration is designed to provide students with a selective overview of the criminal justice system. To fulfill the requirements for the minor, students can take any six courses listed as upper-division requirements for the major and beginning with CJA prefixes. Prerequisites may be required depending on courses chosen.

### • Minor in English

(486) Faculty Advisor: John Miller • (714) 429-5146 • jmiller@nu.edu

#### **Requirements for the Minor**

(6 courses; 27 quarter units)

Choose at least three of the following courses:

| LIT 311 | British Literature I                              |
|---------|---|
| LIT 312 | (Prerequisite: LIT 100)<br>British Literature II  |
| LIT 321 | (Prerequisite: LIT 100)<br>American Literature I  |
| LIT 322 | (Prerequisite: LIT 100)<br>American Literature II |
| LIT 338 | (Prerequisite: LIT 100)<br>Shakespeare            |
|         | (Prerequisite: LIT 100)                           |

Choose the remaining course(s) from the following list:

| Fundamentals of Linguistics  |
|------------------------------|
| (Prerequisites: ENG 100/101) |
| Creative Writing             |
| (Prerequisites: ENG 100/101) |
| Nature Writing               |
| (Prerequisites: ENG 100/101) |
| World Literature             |
| (Prerequisite: LIT 100)      |
| Literary Theory              |
| (Prerequisite: LIT 100)      |
| Mythology                    |
| (Prerequisite: LIT 100)      |
|                              |

| LIT 430 | Children's Literature    |
|---------|--------------------------|
|         | (Prerequisite: LIT 100)  |
| LIT 443 | World of the Short Story |
|         | (Prerequisite: LIT 100)  |
| LIT 446 | Studies in Poetry        |
|         | (Prerequisite: LIT 100)  |
| LIT 450 | Studies in the Novel     |
|         | (Prerequisite: LIT 100)  |
| LIT 456 | Studies in Drama         |
|         | (Prerequisite: LIT 100)  |
| LIT 460 | Gender and Literature    |
|         | (Prerequisite: LIT 100)  |
|         |                          |

## Minor in Global Studies

#### (180)

Faculty Advisor: Daniel Thorburn • (209) 475-1443 • dthorbur@nu.edu

#### **Requirements for the Minor**

(6 courses; 27 quarter units)

Please choose any six of the following:

| COM 385 | Tale, Text, and Hypertext                             |
|---------|---|
|         | (Prerequisites: ENG 100/101)                          |
| GLS 410 | Gender Identity in a Global Context                   |
|         | (Prerequisite:ENG 240)                                |
| GLS 420 | Ecological Revolutions: Economics, Technology and the |
|         | Global Environment                                    |
|         | (Prerequisite: ENG 240)                               |
| GLS 430 | The Global Economy                                    |
|         | (Prerequisite: ENG 240)                               |
| HIS 320 | Culture, Capitalism, and Technology in Modern World   |
|         | History   |
|         | (Prerequisites: ENG 100/101)                          |
| PHL 320 | Comparative Religion                                  |
|         | (Prerequisites: ENG 100/101)                          |
| LIT 342 | World Literature                                      |
|         | (Prerequisites: LIT 100)                              |
| SCI 300 | Geography: Mapping the World                          |
|         |   |

### • Minor in History

#### (181)

Faculty Advisor: Doug Slawson • (858) 642-8390 • dslawson@nu.edu

#### **Requirements for the Minor**

(6 courses; 27 quarter units)

Please choose any six of the following:

| HIS 360 | The American Colonial Experience, 1584-1783<br>(Prerequisites: ENG 100/101 and HIS 220A) |
|---------|--|
| HIS 361 | The Making and Sundering of the United States, 1783-<br>1865                             |
|         | (Prerequisites: ENG 100/101 and HIS 220A)  |
| HIS 362 | The United States Between Wars, 1865- 1917   |
|         | (Prerequisites: ENG 100/101 and HIS 220B)  |
| HIS 363 | The United States since World War I  |
|         | (Prerequisites: ENG 100/101 and HIS 220B)  |
| HIS 431 | The Ancient World  |
|         | (Prerequisites: ENG 100/101 and HIS 233)   |
| HIS 432 | The Classical World  |
|         | (Prerequisites: ENG 100/101 and HIS 233)   |
| HIS 433 | The Post-Classical World   |
|         | (Prerequisites: ENG 100/101 and HIS 233)   |
| HIS 434 | The Modern World, 1500 to the Present  |
|         | (Prerequisites: ENG 100/101 and HIS 234)   |

### Minor in Mathematics

#### (153)

Faculty Advisor: Igor Subbotin • (310) 662-2150 • isubboti@nu.edu

#### **Requirements for the Minor**

(6 courses; 27 quarter units)

Students must select six courses in mathematics beyond MTH 221. Students can complete this minor to fulfill requirements for a Bachelor of Arts in Interdisciplinary Studies.

### Minor in Natural Sciences

#### (500)

Faculty Advisor: Michael Maxwell • (858) 642-8413 • mmaxwell@nu.edu

#### Prerequisites

(4 courses; 12 quarter units)

| SCI 100  | Survey of Bioscience  |
|----------|---|
| SCI 100A | Survey of Bioscience Laboratory (1.5 quarter units)                                     |
|          | (Prerequisite: SCI 100)   |
| SCI 103  | Fundamentals of Geology   |
| SCI 103A | Fundamentals of Geology Laboratory (1.5 quarter units) ( <i>Prerequisite: SCI 103</i> ) |
|          |   |

#### **Requirements for the Minor**

(6 courses; 27 quarter units)

Select six courses from the following:

| SCI 301   | Earth and Planetary Sciences  |
|-----------|---|
| SCI 303   | Introduction to Geographic Information Systems (GIS)<br>and Remote Sensing in Natural Resources |
| SCI 322   | Oceanography  |
| SCI 330   | Ecology   |
| SCI 335   | Environmental Science   |
| SCI 336   | Natural Resources, Conservation, Economics, and Policy  |
| SCI 400   | History of Science  |
|           | (Prerequisite: One 4.5 quarter unit course from the natural sciences)                           |
| SCI 405   | Introduction to Cell and Molecular Biology  |
|           | (Recommended: prior completion of SCI 100 & 100A, or equivalent)                                |
| SCI 405A  | Introduction to Cell and Molecular Biology Lab (1.5 quarter units)                              |
|           | (Prerequisites: SCI 405)  |
| SCI 408   | Introduction to Genetics and Heredity   |
|           | (Recommended: prior completion of SCI 100 & 100A, or  |
|           | equivalent)   |
| SCI 411   | Biodiversity  |
|           | (Recommended: prior completion of SCI 100 and 100A, or equivalent)                              |
| SCI 412   | General Zoology   |
|           | (Recommended: prior completion of SCI 100 & 100A, or equivalent)                                |
| SCI 412A  | General Zoology Laboratory (1.5 quarter units)  |
| 001 112/1 | (Prerequisites: SCI 412)  |
| SCI 420   | Animal Behavior   |
| SCI 450   | Natural History of California: A Field Course   |
|           | 2   |

# Minor in Persian Culture and History

(505)

Faculty Advisor: John Lown (512) 469-9341 email: jlown@nu.edu

# **Requirements for the Minor** (6 courses; 27.0 quarter units)

| SOC 362 | Persian Culture                                |
|---------|--|
|         | (Prerequisites: ENG 100/101)                   |
| HIS 339 | History of the Middle East 600-1600            |
|         | (Prerequisites: ENG 100/101)                   |
| HIS 342 | Modern History of the Middle East              |
|         | (Prerequisites: ENG 100/101)                   |
| PHL 332 | Religion of Islam                              |
|         | (Prerequisites: ENG 100/101)                   |
| POL 410 | Middle Eastern Politics                        |
|         | (Prerequisites: ENG 100/101)                   |
| LIT 320 | Contemporary Persian Literature in Translation |
|         | (Prerequisite: LIT 100)                        |
|         |  |

### Minor in Persian Studies

(504)Faculty Advisor: John Lown (858) 642-8397 email: jlown@nu.edu

#### **Requirements for the Minor**

(8 courses; 30.0 quarter units)

(Required preparation for the minor is FAS 100/100A, FAS 101/101A, FAS 200/200A, FRP 201/201A)

| FRP 300  | Advanced Persian I   |
|----------|--|
|          | (Prerequisites: FRP 201/201A)  |
| FRP 300A | (Co-requisite: FRP 300A)<br>Advanced Persian I Lab (1.5 quarter units) |
| FKI 500A | (Prerequisites: FRP 201/201A)  |
|          | (Co-requisite: FRP 30A)  |
| FRP 301  | Advanced Persian II  |
|          | (Prerequisites: FRP 300/300A)  |
|          | (Co-requisite: FRP 301A)   |
| FRP 301A | Advanced Persian II Lab (1.5 quarter units)                            |
|          | (Prerequisites: FRP 300/300A)  |
|          | (Co-requisite: FRP 301)  |
| FRP 400  | Advanced Persian Conversation  |
|          | (Prerequisites: FRP 301/301A)  |
|          |  |

#### and

Choose three courses from the following:

| SOC 362 | Persian Culture                                |
|---------|--|
|         | (Prerequisites: ENG 100/101)                   |
| HIS 339 | History of the Middle East 600-1600            |
|         | (Prerequisites: ENG 100/101)                   |
| HIS 342 | Modern History of the Middle East              |
|         | (Prerequisites: ENG 100/101)                   |
| PHL 332 | Religion of Islam                              |
|         | (Prerequisites: ENG 100/101)                   |
| POL 410 | Middle Eastern Politics                        |
|         | (Prerequisites: English 100/101)               |
| LIT 320 | Contemporary Persian Literature in Translation |
|         | (Prerequisite: LIT 100)                        |
| FRP 350 | Fundamentals of Persian Translation            |
|         | (Prerequisites: FRP 301/301A)                  |
| SOC 423 | Iranian Cinema                                 |
|         | (Prerequisites: ENG 100/101)                   |
| POL 415 | Petroleum and the Persian Gulf                 |

### Minor in Political Science

#### (487)

Faculty Advisor: Shak Hanish • (858) 642-8494 • shanish@nu.edu

#### Preparation for the Minor

| POL 100 | Introduction to Political Science          |
|---------|--|
|         | (Prerequisites: ENG 100/101)               |
| POL 201 | American Government and Politics           |
|         | (Prerequisites: ENG 100/101)               |
| MTH 210 | Introduction to Probability and Statistics |
|         | (Prerequisite: Placement Evaluation)       |

#### **Program Requirements**

(6 courses, 27 quarter units)

Students wishing to minor in Political Science must take the following three (3) courses:

| POL 330 | Political Theory             |
|---------|------------------------------|
|         | (Prerequisites: ENG 100/101) |
| POL 340 | Comparative Politics         |
|         | (Prerequisites: ENG 100/101) |
| POL 350 | International Relations      |
|         | (Prerequisites: ENG 100/101) |

Students must also choose three (3) of the following courses to complete the unit requirements for the minor:

| POL 320 | Politics of Social Movements                       |
|---------|--|
|         | (Prerequisites: ENG 100/101)                       |
| POL 400 | European Politics                                  |
|         | (Prerequisites: ENG 100/101)                       |
| POL 410 | Middle Eastern Politics                            |
|         | (Prerequisites: ENG 100/101)                       |
| POL 490 | Guided Study                                       |
| POL 539 | Dynamics of World Politics                         |
| POL 540 | The American Political system                      |
| SOC 385 | Methods of Social Inquiry                          |
|         | (Prerequisites: SOC 100, MTH 210, and ENG 100/101) |
| SOC 540 | Power and Social Change                            |
|         | (Prerequisites: ENG 100/101)                       |

#### Minor in Pre-Law Studies

(455)

Faculty Advisor: Jack Hamlin • (858) 642-8405 • jhamlin@nu.edu

#### **Requirements for the Minor**

(6 courses; 27 quarter units)

A minor in pre-law studies helps prepare business professionals for the increasing legal implications of business in a global environment.

| LAW 304 | Legal Aspects of Business I               |
|---------|---|
| LAW 305 | Legal Aspects of Business II              |
|         | (Prerequisite: LAW 304)                   |
| LAW 408 | Legal Writing, Research and Oral Argument |
| LAW 400 | Current Legal Issues                      |
| ADR 405 | Negotiation Fundamentals                  |
| MGT 400 | Ethics in Law, Business and Management    |
|         |   |

# Minor in Sociology

(485)

Faculty Advisor: Lorna L. Zukas • (858) 642-8437 • lzukas@nu.edu

#### **Requirements for the Minor**

(6 courses; 27 quarter units)

To minor in Sociology students must successfully complete six of the following courses with a grade C or better.

| SOC 325 | Contemporary Popular Culture                         |
|---------|--|
|         | (Prerequisites: ENG 100/101)                         |
| SOC 328 | Intercultural Thinking and Creativity                |
|         | (Prerequisites: ENG 100/101)                         |
| SOC 344 | Marriage, Sex and Family                             |
|         | (Prerequisites: ENG 100/101)                         |
| SOC 443 | Sociology of Deviance                                |
|         | (Prerequisites: SOC 100 and ENG 100/101)             |
| SOC 445 | Contemporary Social Problems                         |
|         | (Prerequisites: ENG 100/101)                         |
| SOC 365 | Classical Social Theory                              |
|         | (Prerequisites: SOC 100 and ENG 100/101)             |
| SOC 375 | Contemporary Social Theory                           |
|         | (Prerequisites: SOC 100 and ENG 100/101)             |
| SOC 385 | Method of Social Inquiry                             |
|         | (Prerequisites: SOC 100, MTH 210, and ENG 100/101)   |
| SOC 455 | Organizational Sociology                             |
|         | (Prerequisites: SOC 100 and ENG 100/101)             |
| SOC 500 | Understanding Cultural Pluralism in American Society |
|         | (Prerequisites: ENG 100/101)                         |
| SOC 540 | Power and Social Change                              |
|         | (Prerequisites: ENG 100/101)                         |
|         |  |

# **Graduate Degrees**

# MASTER OF ARTS IN COUNSELING PSYCHOLOGY

(710-500)

Faculty Advisor: Charles M. Powell • (310) 662-2153 • cpowell@nu.edu

The Master of Arts in Counseling Psychology degree emphasizes marriage and family therapy and is designed for students who are committed to the practice of individual, couples, family, adolescent, and child psychotherapy. This degree meets the academic requirements necessary to sit for the Marriage and Family Therapist (MFT) License mandated by the Board of Behavioral Science in the state of California. The degree may not meet requirements in other states. Students should consult the licensing boards of the appropriate states for information about the MFT outside of California. It also prepares students for the pursuit of doctoral studies in practitioner-oriented programs such as counseling or clinical psychology.

#### Program Outcomes

The primary program outcomes and competencies are:

- Entry level expertise in the diagnosis of mental disorders.
- Entry level expertise in development of a treatment plan.
- Entry level expertise in the implementation of treatment plans.
- Professional integrity and legal and ethical standards with clients and staff.
- Entry level competence in case presentations, oral reports, and written reports.
- Theoretical and clinical knowledge.
- Graduate level competency in theoretical research and written reports.
- Competency in psychopharmacology.

- Competency in multi-cultural awareness and diversity as it pertains to clinical situations of assessment and treatment.
- Competency in knowledge of human development (child, adolescent, and adult).
- Entry level competency in a broad range of clinical orientations and therapies.

#### **Application Requirements**

Students interested in enrolling in this program should contact the appropriate campus for further information regarding the application process.

To be considered for admission, applicants must meet the University graduate admission requirements listed in the general information as well as the MAC program criteria. All applicants are evaluated for the psychotherapy profession, regardless of career goals. Students must submit an application packet, pass a personal interview, and attend the program orientation before they may begin classes.

Students should consult the regional faculty to determine at what point in the sequence they may enter the program. Entrance points may differ in each region.

#### **Degree Requirements**

(18 courses; 81 quarter units)

To receive the Master of Arts in Counseling Psychology, students must complete at least 78 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation. In addition:

- Students must complete all coursework with a grade of "B" or better. Students who receive a grade of "C+" or lower in two (2) or more courses must repeat all such courses before being allowed to continue in the program.
- Students must complete a minimum of 20 hours of individual, marital, family, or group psychotherapy before taking PSY 631A and another 20 hours before graduation for a total of 40 hours.
- Students must obtain a total of 200 hours of counseling experience at a designated practicum site with an approved practicum site supervisor during PSY 631B. One-hundred-fifty of the 200 hours must involve face-to-face psychotherapy with clients.
- Independent studies are not allowed in this program.
- Students may not take more than one course per month.
- Students seeking licensure must register with the Board of Behavioral Science Examiners (BBS) after graduation and fulfill all BBS licensing requirements.

Students are also urged to join the California Association of Marriage and Family Therapy and the American Association of Marriage and Family Therapists. Students must obtain malpractice insurance through C.A.M.F.T. or another professional organization.

Students must complete all coursework within seven years. Any courses taken more than seven years ago must be repeated.

#### Prerequisite Recommended

(1 course; 4.5 quarter units)

PSY 429 Introduction to Personality Theory

Candidates who have not previously completed this course or its equivalent are strongly urged to do so. PSY 429 can be taken either online or in a classroom.

#### **Program Core Requirements**

(18 courses; 81 quarter units)

These courses are scheduled on a limited basis. Students are encouraged to consult the regional faculty for the course sequence requirement, which may differ in each region. Enrollment in these courses is limited to MA Counseling Psychology students unless the course is specifically listed in another degree.

| PSY 635  | Development Contexts in Psychotherapy: Childhood and Adolescence |
|----------|--|
| PSY 629A | Development Contexts in Psychotherapy: Adulthood<br>and Aging    |
| PSY 653  | Research: Paradigms and Critiques                                |
| PSY 623A | Perspectives on Psychopathology Individual                       |
|          | Psychotherapy and Clinical Assessment I                          |
| PSY 623B | Principles of Psychotherapy I: Assessment and                    |
|          | Interventions Individual Psychotherapy and Clinical              |
|          | Assessment II  |
| PSY 636  | Principles of Psychotherapy II: Child and Adolescent             |
| PSY 632A | Couples/Family Therapy A   |
| PSY 632B | Couples/Family Therapy B   |
|          | (Prerequisite: PSY 632A)   |
| PSY 628  | Principles of Psychotherapy III: Group Approaches                |
| PSY 627  | Legal and Ethical Issues in Marriage and Family                  |
|          | Therapy  |
| PSY 631A | Practicum I: Marital and Family Therapy                          |
|          | (Prerequisite: Department approval)                              |
| PSY 631B | Practicum II: Marital and Family Therapy*                        |
|          | (Prerequisites: PSY 631A and Department approval)                |
| PSY 637  | Principles of Psychotherapy V: Cultural Competencies             |
| PSY 624  | Assessment Techniques for Marriage and Family                    |
|          | Therapists   |
| PSY 642  | Relational Violence  |
| CHD 640  | Addictions: Contexts and Treatments                              |
| PSY 626  | Human Sexuality in Psychotherapy                                 |
| PSY 655  | Psychopharmacology   |

\*This seminar meets once a week for two hours during six consecutive months in addition to the onsite practicum requirements. This seminar may meet in the late afternoon.

# ■ MASTER OF ARTS IN ENGLISH ~ ®

(710-504)

Faculty Advisor: Janet Baker • (858) 642-8472 • jbaker@nu.edu

The Master of Arts in English provides a balanced and comprehensive program of graduate study in literature and writing. The program is ideal for teachers who desire a content M.A. beyond the credential. It is also excellent preparation for doctoral studies in English, teaching in the two-year college, or other careers requiring a high degree of literacy.

The curriculum offers a balanced coverage of major approaches to literature, including theoretical, historical, comparative, thematic, multicultural, and genre studies. It provides students with the tools and skills to produce literary scholarship of professional quality and to participate in the ongoing scholarly discussions of issues in the field of literary study.

#### **Program Outcomes**

By the end of this program, students shall have the tools and skills to produce literary scholarship of professional quality and to participate in the ongoing scholarly discussions of issues in the field of literary study.

Specifically, by the end of this program, students will be able to:

• Research and apply relevant criticism in sustained analyses and

interpretations of specific works of fiction, non-fiction, and poetry.

- Evaluate the relevance and validity of different theoretical approaches (e.g., historicist, biographical, etc.) to the understanding of specific works of literature.
- Engage in informed critical discussion, both oral and written, of theoretical issues pertaining to the study of literature.
- Synthesize current theory and practice in the study of American multicultural literature.
- Evaluate the complexities of canon formation.
- Engage in informed critical discussion, both oral and written, of the works and criticism of a specific literary period or movement.
- Participate in rigorous critiques of the scholarly works of others.
- Revise and expand a scholarly paper to submit for publication in a scholarly or literary journal.

#### Writing Across the Curriculum

The University's Writing Across the Curriculum program offers opportunities for students to participate in meaningful projects that will enhance their career development. These projects include editing and producing the student literary journal, The *GNU* and working on the *WHACK*, the Writing Across the Curriculum Newsletter. Contact Vicki Martineau, Director of Writing Across the Curriculum, at vmartine@nu.edu, for additional information.

In addition, various departmental faculty have opportunities for students to assist them with teaching, scholarly projects, or other activities and students can receive valuable experience and mentoring from working with them. Contact individual faculty members for information.

#### **Degree Requirements**

(10 courses; 45 quarter units)

To receive the Master of Arts in English, students must complete at least 45 quarter units. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the General Catalog section on graduate admission requirements for specific information regarding admission and evaluation.

#### **Program Core Requirements**

(6 courses; 27 quarter units)

| Seminar in Literary Theory  |
|---|
| Seminar in Multicultural Literature of North America  |
| Seminar in a Literary Period or Movement I (if not used to fulfill another program requirement)   |
|   |
| Seminar in a Literary Period or Movement II (if not used to fulfill another program requirement)  |
| Seminar in Poetry   |
| Seminar in a Major Author I (if not used to fulfill another program requirement)  |
|   |
| Seminar in a Major Author II (if not used to fulfill another program requirement)   |
| English Capstone course   |
| (Prerequisite: All other program requirements must be<br>completed before enrolling in this course. Exceptions may be<br>made if student is within two courses of program completion,<br>only with the approval of the Program Director.) |
|   |

#### **Program Electives**

(4 courses; 18 quarter units)

Select from the following list of courses:

| ENG 620A or ENG 620B |  |  |
|----------------------|--|--|
|                      | Seminar in a Literary Period or Movement I or II (if not |  |
|                      | used to fulfill another program requirement)             |  |
| MCW 630              | Seminar in Fiction                                       |  |
| MCW 650              | Seminar in Creative Non-Fiction                          |  |
| ENG 660              | Seminar in Literary Hypermedia                           |  |
| ENG 665              | Film Theory  |  |
| ENG 666              | Film History: The Silents                                |  |
| ENG 667              | Film History: American Film                              |  |
| ENG 668              | Film Genre Studies                                       |  |
| ENG 669              | World Film   |  |
| ENG 670              | Seminar in Comparative Literary Studies                  |  |
| ENG 690A or ENG 690B |  |  |
|                      | Seminar in a Major Author I or II                        |  |
|                      | (if not used to fulfill another program requirement)     |  |
| ENG 680A             | Seminar in a Theme I                                     |  |
| ENG 680B             | Seminar in a Theme II                                    |  |
| ENG 685              | Great Directors: American                                |  |
| ENG 686              | Great Directors: International                           |  |

# ■ MASTER OF ARTS IN HUMAN BEHAVIOR

(710-501)

Faculty Advisor: Charles Tatum • (858) 642-8476 • ctatum@nu.edu

The Master of Arts in Human Behavior is designed for people desiring greater knowledge of the behavioral sciences. The degree exposes the student to a wide array of behavioral topics covering personal, social and organizational issues. The program is intended for students who have specific ambitions in the fields of supervision, management, and administration, but should also appeal to students undergoing life transitions, seeking personal or career growth, or requiring preparation for doctoral-level training.

#### **Program Outcomes**

The primary program outcomes and competencies are:

- Synthesize and apply communication theory and practice in real-world situations.
- Develop a personal and professional code of ethics based on knowledge and understanding of moral and ethical principles and values.
- Assimilate adult development and human sexuality theories and principles into personal and interpersonal growth.
- Analyze and apply behavioral and organizational change processes to personal, social, and organizational settings.
- Integrate theories of leadership into applied areas of supervision, management, and administration.
- Demonstrate practical competence in the use of behavioral theory, research and assessment.
- Produce written materials (papers, essays, projects, journals, etc.) that analyze, integrate, and critique critical theories, issues and research in human behavior.
- Demonstrate oral fluency (class debates, group discussions, individual presentations, etc.) in articulation of the theory and practice of behavioral science.
- Demonstrate multi-cultural awareness and appreciation of human diversity.

#### **Degree Requirements**

(12 courses; 54 quarter units)

To receive the Master of Arts in Human Behavior, students must complete at least 54 quarter units of graduate work. A total of 13.5

quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

#### **Program Core Requirements**

(10 courses; 45 quarter units)

| HUB 648  | Personal Growth and Communication     |
|----------|---------------------------------------|
| HUB 646  | Personal and Professional Ethics      |
| HUB 641  | Stages of Adult Development           |
| HUB 639  | Contemporary Issues in Sexuality      |
| HUB 601A | Organizational Behavior               |
| HUB 642  | Theories of Behavior Change           |
| HUB 601D | Creative Leadership                   |
| HUB 650  | Foundations of Behavioral Research    |
| HUB 660  | Assessment in Organizations           |
|          | (Prerequisite: HUB 650)               |
| HUB 680  | Integrative Project in Human Behavior |
|          | (Capstone course)                     |
|          | (Prerequisite: HUB 650)               |
|          |                                       |

#### **Program Electives**

(2 courses; 9 quarter units)

Students can select graduate elective courses from the following course prefixes: CHD, HRM, HUB, MKT, MGT and SOC (CHD 601 and SOC 604 are highly recommended). In addition, some education and psychology courses are acceptable with the approval of the Chair of the Department of Psychology. (Note: Due to enrollment restrictions, special permission by the Chair of the Department of Psychology is required to take CHD 640 or any courses designated PSY 600 or above).

# ■ MASTER OF FINE ARTS IN CREATIVE WRITING<sup>®</sup>

(715-505)

Faculty Advisor: Colin Dickey • (310) 662-2131 • cdickey@nu.edu

The Master of Fine Arts in Creative Writing offers students the opportunity to master advanced skills in carrying out independent and sustained activity in creative writing in the areas of fiction, literary nonfiction, poetry, and screenwriting. Guided development of each writer's talents culminates in a final project, a publishablequality thesis in the area of specialty. This final project should demonstrate a critical application of specialist knowledge in the chosen specialty and should make an independent contribution to existing work in that area. This program is excellent preparation for a professional career in writing, working in the areas of publishing or filmmaking, and is the minimal academic qualification appropriate for those who desire to teach writing at the college or university level.

Faculty in the MFA in Creative Writing program maintain a strong commitment to scholarly value and the active support of students in their passion for literature, film and writing. Creative writing students are expected to make important contributions to the publication of the student literary journal (GNU) and actively participate in seminars designed to foster creative and critical debate. Courses are directed to the refinement of creative practice and academic excellence. Faculty are experienced and published writers in their fields and offer supervision in the areas of fiction, poetry, literary nonfiction, and screenwriting.

#### **Program Outcomes**

Upon completion of the Master of Fine Arts in Creative Writing, graduates will demonstrate the following proficiencies:

- expertise in the various aesthetic theories pertaining to specialty (fiction, literary nonfiction, poetry, or screenwriting)
- expertise in the practical and theoretical models of teaching and learning the writing of fiction, literary nonfiction, poetry, and screenwriting
- expertise in recognizing and commenting critically on specific works of literature and screenwriting
- expertise in the development of publishable-quality writing in area of specialty (fiction, literary nonfiction, poetry, or screenwriting)
- ability to communicate effectively and knowledgeably on such matters as plot, characterization, style, point of view, narrative technique, language, and other issues of fiction
- ability to communicative effectively and knowledgeably on such matters as voice, plot, characterization, style, point of view, narrative technique, language, and other issues of literary nonfiction
- ability to communicate effectively and knowledgeably on such matters as language, style, themes, technique, rhythm, form, and other issues of poetry
- ability to communicate effectively and knowledgeably on such matters as plot, characterization, style, point of view, narrative technique, language, form, dialogue, and other issues of screenwriting

#### **Application Requirements**

To be considered for admission, applicants must meet the University graduate admission requirements listed in the general information. In addition, applicants in creative writing should submit portfolios of their writing directly to: cdickey@nu.edu.

The portfolio should include 20-40 pages of fiction or literary nonfiction (usually two to three short stories or essays), or 10-20 pages of poetry, or a completed screenplay, or a substantial sample of work in several forms.

Based on the portfolio, applicants may be advised to complete one or more of the following undergraduate courses prior to enrolling in the advanced writing workshops:

| ENG 365 | Creative Writing             |
|---------|------------------------------|
|         | (Prerequisites: ENG 100/101) |
| LIT 443 | World of the Short Story     |
|         | (Prerequisite: LIT 100)      |
| LIT 446 | Studies in Poetry            |
|         | (Prerequisite: LIT 100)      |
| LIT 450 | Studies in the Novel         |
|         | (Prerequisite: LIT 100)      |
| LIT 456 | Studies in Drama             |
|         | (Prerequisite: LIT 100)      |

#### Advancement to Candidacy

A student is advanced to candidacy for the Master of Fine Arts degree after successful completion of MCW 600 and two core courses. Grades below "B" must be repeated.

#### **Career Development Opportunities**

A number of career development opportunities are available for degree candidates who plan to teach, work in film, or pursue careers in writing or publishing. A small number of pre-established internship positions will be available through National University, which may include: tutoring positions in the online Writing Center; teaching assistantships in the Composition program; editorial positions on the Gnu, National University's literary journal; coordinating positions for an annual Writing and Literary Conference. Other pre-established positions, outside of the University, may include: organizing a reading series at a local library; teaching a series of writing workshops at a low-income housing center; or working for a small press or literary journal. Students interested in these opportunities should register for MCW620, Writing Internship, and will be eligible to apply for the preestablished positions. All students enrolled in MCW620 will have a chance to develop and implement an internship program appropriate to their specific interests.

#### Degree Requirements

(10 courses; 45 quarter units)

To receive the MFA in Creative Writing, students must complete at least 45-quarter units; a total of 4.5 quarter units may be granted for equivalent work completed at another institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. Students should refer to the General Catalog section on graduate admission requirements for specific information regarding admission and evaluation.

#### **Core Requirements**

(4 courses; 18 quarter units)

Students are required to take MCW 600, one seminar in their chosen specialty, and two additional courses of their choice in different areas.

MCW 600 Pedagogy of Creative Writing

and choose three of the following courses:

| MCW 620   | Writing Internship             |  |
|---|--------------------------------|--|
| MCW 630   | Seminar in Fiction Writing     |  |
| MCW 645   | Seminar in Poetry Writing      |  |
| MCW 650   | Seminar in Creative Nonfiction |  |
| MDC 680   | Seminar in Screenwriting       |  |
| MCW 600 is four weeks; all other writing workshops and seminars |                                |  |
| are eight weeks in duration.                                    |                                |  |

#### **Specialized Study**

#### (2 courses; 9 quarter units)

(Prerequisite for advanced workshops: approval of Application Portfolio)

Students are expected to take a minimum of two seminars in their specialty. All advanced creative writing courses are conducted by teachers who are accomplished creative writers sensitive to the efforts of writing. Classes are conducted as workshops, with student work comprising much of the text for the course.

| MCW 630A Advanced Workshop in Fiction I<br>(Prerequisite: MCW 630)              |
|---|
| and   |
| MCW 630B Advanced Workshop in Fiction II<br>(Prerequisite: MCW 630)             |
| or  |
| MCW 640A Advanced Workshop in Poetry I<br>(Prerequisite: MCW 645)               |
| and   |
| MCW 640B Advanced Workshop in Poetry II<br>(Prerequisite: MCW 645)              |
| or  |
| MCW 650A Advanced Workshop in Literary Nonfiction I<br>(Prerequisite: MCW 650)  |
| and   |
| MCW 650B Advanced Workshop in Literary Nonfiction II<br>(Prerequisite: MCW 650) |

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or

MCW 680A Advanced Workshop in Screenwriting I (Prerequisite: MDC 680)

and

MCW 680B Advanced Workshop in Screenwriting II (Prerequisite: MDC 680 and MCW 680A)

#### **Elective Requirements**

(2 courses; 9 quarter units)

Students choose two electives in form and technique specific to specialty; courses must constitute a coherent program of study. It is possible to pursue a course in another discipline when such study is demonstrably essential to the student's creative work. Students are encouraged to choose electives to strengthen areas of weakness; pursue technical or theoretical knowledge essential to the student's creative work, or to otherwise enrich the degree program. The candidate must work out a specific program in conjunction with the lead program faculty.

Approved courses (other courses may be approved by lead program faculty)

| ENG 600  | Seminar in Literary Theory                           |
|----------|--|
| ENG 610  | Seminar in Multicultural Literature of North America |
| ENG 620A | Seminar in a Literary Period or Movement I           |
| ENG 620B | Seminar in a Literary Period or Movement II          |
| ENG 640  | Seminar in Poetry                                    |
| ENG 660  | Seminar in Literary Hypermedia                       |
| ENG 670  | Seminar in Comparative Literary Studies              |
| ENG 680A | Seminar in a Theme I                                 |
| ENG 680B | Seminar in a Theme II                                |
| ENG 690A | Seminar in a Major Author I                          |
| ENG 690B | Seminar in a Major Author II                         |
| ENG 665  | Film Theory  |
| ENG 666  | Film History: The Silents                            |
| ENG 667  | Film History: American Film                          |
| ENG 668  | Film Genre Studies                                   |
| ENG 669  | World Film   |
| ENG 685  | Great Directors: American                            |
| ENG 686  | Great Directors: International                       |
|          |  |

#### Thesis Courses

(2 courses; 9 quarter units)

| MCW 660 | Thesis I (Practicum)  |
|---------|---|
|         | ( <i>Prerequisite: all core, specialized study and elective courses</i> ) |
| MCW 670 | Thesis II (Revision)  |
|         | (Prerequisite: MCW 660)   |

Thesis: The thesis must be a mature, substantial body of work e.g. a collection of stories, essays, or poems, a novel, or a full-length screenplay. The thesis will include a preface (minimum 1000 words) in which the writer discusses her/his evolution as an artist and the evolution of the work. The student will choose a mentor for the thesis, and will work with the mentor in an individualized manner, decided upon through conference with the mentor.

#### Language Requirement

There is no language requirement for this program. It is possible, however, to pursue a series of electives in a particular language when such study is demonstrably essential to the student's creative work. The candidate must work out a specific program in conjunction with the lead program faculty.

# ■ MASTER OF FORENSIC SCIENCES ✓

#### (760)

Faculty Advisor: Ismail Sebetan • (858) 642-8419 • isebetan@nu.edu

The Master of Forensic Sciences (MFS) is a specialized professional degree designed for law enforcement, lab personnel, attorneys, investigators, and other professionals seeking to upgrade their existing skills, as well as individuals who are interested in pursuing a career in the forensic sciences, law, law enforcement, private or governmental laboratories, jails and corrections, and the Medical Examiner's Office. The field of forensics focuses on the application of scientific methods to the resolution of legal problems.

#### Program Outcomes

The intended outcome of the MFS courses is to prepare students with the foundation, knowledge, and skills needed to meet the scientific and practical demands of the forensic profession as it interfaces with the community at all levels.

Upon successful completion of this program, students will be able to:

- Describe the component of medico-legal investigations and implications of death investigations with respect to the roles and responsibilities of the different forensic disciplines, and demonstrate knowledge of the forensic/medico-legal terminology and the scientific techniques used in medico-legal investigations.
- Identify the characteristics that differentiate the manner of death (natural, homicide, suicide, or accidental), and the principles of methods used for estimation of the time of death and human identification.
- Explain the methods and procedures applied by the forensic/crime laboratories to identify and characterize the genetic markers and DNA from the forensic biological evidentiary samples such as blood, semen, saliva, and other body fluids and stains, to associate a person, place, or item with a crime. In addition to the civil applications of analysis, the biological sample may be used to solve the cases of disputed paternity and baby mix-up.
- Describe the principles and fundamentals of poisons and the circumstances of poisoning cases and identify the required toxicological samples, methods of collection, preservation, and analysis.
- Describe items of physical evidence at crime scene, and methods of collection, preservation, analysis, comparison, and report preparation.
- Describe and demonstrate the basic principles of forensic photography, and explain the legal issues related to forensic photography and courtroom or trial presentation.
- Identify the legal issues involved in crime scene processing and evidence collection and explain fundamental crime scene processing techniques with various types of physical evidence.
- Describe different methods used for human identification with the role played by the forensic anthropologist in death investigations.
- Develop a realistic and broader perspective of the theories, techniques, and practices which apply to virtually all investigations.
- Explain the intrinsic factors to all successful investigations that it is more art than science; and that a course of advanced study must finally be discussed in terms of precepts rather than rigid methods despite the methodical and exhausting treatment of a particular case. The course will also employ general principles and special theorems; and dispel the myths that every crime is intrinsically solvable, or that there exists a normative criteria for judging the success or failure of an investigation.
- Describe methods used in crime scene analysis and demonstrate full awareness of methods appropriate to profiling with applying profiling knowledge to crime scene variables.

- Describe the legal and psychological issues involved in competency to stand trial, diminished capacity, and insanity defenses.
- Evaluate the current state of the art, tools, and techniques of psychological and psychiatric testing.
- Understand the role of the forensic scientists as expert witnesses.
- Fully understand the meaning and objective of scientific research, develop research questions, and apply the appropriate research methodology, discuss the data, and make recommendations based on the obtained data and the analyzed results.

The Master of Forensic Sciences degree program offers two areas of specialization (AOS). Students are required to take one AOS.

### Degree Requirements

(12 courses; 54 quarter units)

For students in the BS in Criminal Justice Administration/MFS transition program, the University will waive the forensic sciences course(s) taken as part of the bachelor's degree (see BS in Criminal Justice transition program), but these students must still meet the residency requirements for the MFS.

To receive an MFS, students must complete at least 54 quarter units of graduate coursework. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

Students must have an undergraduate degree in a laboratory science in order to enroll in the MFS with a specialization in criminalistics. The MFS with a specialization in investigation does not have a specific major requirement for the undergraduate degree.

#### **Core Requirements**

(8 courses; 36 quarter units)

| FSC 630  | Principles of Forensic Medicine             |
|--|---|
| FSC 642  | Forensic Pathology                          |
|  | (Prerequisite: FSC 630)                     |
| FSC 643  | Forensic Psychology, Psychiatry and the Law |
| FSC 648  | Forensic and Crime Scene Photography        |
| FSC 631  | Major Case Investigation                    |
| FSC 647  | Crime Scene Investigation                   |
| FSC 654  | Criminal Investigation Analysis: Profiling  |
| FSC 662  | Supervised Graduate Research Project*       |
| *This is a two-month, one-meeting-per week course with a significant |   |
| research co  | mponent. Grading is by H, S, or U.          |
|  |   |

Students who do not complete the Research Project within the twomonth period are eligible, at the discretion of the instructor, to receive a grade of "IP" with a maximum of a one time six-month extension. Students who do not complete the project at the end of the extension period will need to retake FSC 662. No grade of "I" (Incomplete) can be given for this course.

# MFS Areas of Specialization (AOS)

# ▲ Specialization in Criminalistics

(886)

This AOS in criminalistics requires that students have an undergraduate degree in physical science. The specialization courses include Trace Evidence, Advanced Forensic Toxicology, Advanced Forensic Serology and DNA, and Forensic Anthropology and Archeology, as well as coursework in: Forensic Medicine and Pathology; Psychology, Psychiatry, and the Law; Major Case Investigation; Crime Scene Investigation; and Criminal Investigation Analysis (Profiling). The program culminates in a supervised master's research project directed by full-time faculty and a committee of associate and core adjunct faculty selected by students from their program.

#### **Program Requirements**

(4 courses; 18 quarter units)

| FSC 632 | Trace Evidence                       |
|---------|--------------------------------------|
| FSC 633 | Advanced Forensic Toxicology         |
| FSC 634 | Advanced Forensic Serology and DNA   |
| FSC 635 | Forensic Anthropology and Archeology |

## ▲ Specialization in Investigation ℃

(887)

This AOS in investigation is designed to provide graduate education in the most current and advanced forensic investigative techniques available in the field, with a wide understanding of the concepts underlying the forensic sciences. This program is suitable for those students who are interested in pursuing a career in forensic crime and death investigations. The program also allows individuals who are currently working in forensic investigation areas to develop and upgrade their individual educational skills. The specialization courses include Advanced Criminalistics, Electronic Crime Scene Investigation: Computer Forensics, Constitution and Criminal Procedure, and Advanced Fingerprint Analysis. The program also includes forensic-related writing and research. The program culminates in a supervised master's research project directed by fulltime faculty and a committee of associate and core adjunct faculty selected by students from their program.

#### **Program Requirements**

(4 courses; 18 quarter units)

| FSC 620<br>FSC 621 | Advanced Criminalistics<br>Electronic Crime Scene Investigation: Computer |
|--------------------|---|
|                    | Forensics   |
| FSC 622            | Constitution and Criminal Procedure                                       |
| FSC 623            | Advanced Fingerprint Analysis   |
|                    |   |

#### **Program Electives**

For electives, students can take courses with prefixes from the School of Business and Management, or they can take:

FSC 661Internship in Forensic Sciences (1.5-4.5 quarter units)FSC 651Selected Topics in Forensic Sciences

# MASTER OF PUBLIC ADMINISTRATION

#### (740)

Faculty Advisor: Chandrika Kelso • (858 642 8433) • ckelso@nu.edu

The Master of Public Administration (MPA) is designed for students who want to pursue the challenging career of government management at the federal, state, or local level and nonprofit management. With an emphasis on the proactive public administrator, it is for those public administrators who aspire to toplevel positions. The degree provides a wide range of skills in financial management, budgeting, quantitative methods, urban planning and redevelopment, personnel policies, politics, and grant writing.

#### **Program Outcomes**

Upon successful completion of this program, students will be able to:

- Demonstrate critical thinking skills relevant to public administration in a global world.
- Analyze and evaluate the concept of new public management within a historical context.
- Identify and analyze the impact of political influences on the public sector decision-making process.
- Explain the division of power within American government as established by the U.S. Constitution.
- Describe, analyze, and evaluate the various approaches to managing government employees.
- Describe the basic concepts and methodologies of statistics and research in public administration.
- Evaluate the effectiveness of public administration strategies for dealing with the media and issue networks.
- Explain and evaluate community relations in reference to government support, justice and law enforcement.
- Analyze and evaluate the impact of public administration decisions on urban planning and redevelopment.
- Explain and evaluate public administration trends and strategies for financing local government.
- Identify resources and approaches for developing grant proposals for community programs and services.
- Describe the role and function of public administration in today's multicultural environment.

#### **Degree Requirements**

(12 courses; 54 quarter units)

For students in the BS in Criminal Justice Administration/MPA transition program, the University will waive up to two public administration courses taken as part of the bachelor's degree (see BS in Criminal Justice Administration transition program), but these students must still meet the residency requirements for the MPA. The number of courses waived is dependent on the courses taken and grades earned in the transition program.

To be awarded a Master of Public Administration, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

#### **Core Requirements**

(8 courses; 36 quarter units)

- ODV 600 Theory and Practice of Organizational Development
- PAD 620 Foundations of Public Administration
- PAD 622 Seminar in Urban Affairs
- PAD 626 Public Personnel Policy
- PAD 627 Quantitative Methods in Public Administration
- PAD 632 Financial Management and Grant Administration
- PAD 631 Urban Planning and Redevelopment
- PAD 644 MPA Project

#### **Program Electives**

(4 courses; 18 quarter units)

For electives, students should select a general set of 600-level courses offered in the School of Business and Management, or those offered in other schools with the approval of the dean of the School of Business and Management.

# **MPA Areas of Specialization**

## ▲ Specialization in Alternative Dispute Resolution

#### (740-000-898)

Faculty Advisor: Jack Hamlin • (858) 642-8405 • jhamlin@nu.edu

This area of specialization is designed for students who wish to complete an MPA program while focusing their graduate studies in Alternative Dispute Resolution, which is one of the fastest growing fields in the U.S. and the world at large. The program provides students with a broad knowledge of Alternative Dispute Resolution subjects and will enable students to not only become effective mediators and negotiators but also to use these skills to resolve conflict in the workplace. Expertise in Alternative Dispute Resolution is in high demand in the business community, local, state, and federal governments, and in neighborhood communities.

#### **Program Requirements**

(4 courses; 18 quarter units)

| ADR 600 | Alternative Dispute Resolution |
|---------|--------------------------------|
| ADR 605 | Negotiation                    |
| ADR 610 | Facilitation                   |
| ADR 615 | Mediation                      |

# ▲ Specialization in Human Resource Management ℃

#### (852)

Faculty Advisor: Bernadette Baum • (858) 642-8404 • bbaum@nu.edu

This area of specialization focuses on managing people, the human resource of the organization. Moving beyond common sense and good interpersonal skills, these courses provide students with the knowledge to recruit, select, train, evaluate, and compensate employees. Students learn how changes in the workplace, such as governmental regulations, global competition, developing technologies and organizational transformations, influence the performance and productivity of workers. Technical knowledge and practical skills for dealing with a multicultural workforce offer students new ideas on leadership and effective tools for managing human resource.

#### **Program Requirements**

(4 courses; 18 quarter units)

Students electing to specialize in human resource management must select four of the following courses.

Legal, Ethical, and Safety Issues in Human Resource HRM 630 Management HRM 633A Seminar in Employee Relations, Labor Relations and Union Management **ODV 600** Theory and Practice of Organizational Development ODV 601 Integrating Performance Management, Technology, and Organizational Communication ODV 606 Seminar in Training and Development ODV 610 Advanced Studies in Organizational Behavior in a Diverse Society HRM 637 Workforce Planning, Development, and Outsourcing HRM 667 Compensation and Benefits MGT 651 Managing Safety Issues and Regulations

# ▲ Specialization in Organizational Leadership<sup>√</sup><sup>⊕</sup>

#### (888)

Faculty Advisor: Julia Buchanan • (858) 642-8453 • jbuchanan@nu.edu

The purpose of the area of specialization in organizational leadership is to provide students with the skills and theoretical concepts that will assist them when seeking promotions or positions in management and supervision. This area of specialization is designed to prepare diverse adult learners to become effective, changeoriented leaders in an international society by adding distinctive and challenging curricula.

The area of specialization in organizational leadership is ideal for individuals who desire to understand the technical and reflective processes that often accompany opportunities to exercise leadership in profit and not-for-profit organizations.

#### **Program Requirements**

(4 courses; 18 quarter units)

- LED 602 Developing and Implementing Groups and Teams
- LED 603 Organizational Leadership
- LED 604 Change and Adaptation within Organizations
- LED 605 Negotiation, Bargaining, Conflict Resolution

### ▲ Specialization in Public Finance </

(882)

In lieu of general electives, a student can choose a specialization in public finance. This area of specialization provides an opportunity for students to acquire specific knowledge and develop practical skills in public finance. It particularly emphasizes the areas of public/private partnerships and contract bargaining and negotiation – critical areas in public administration today. The population served is that of public employees working in the areas of public finance and/or human resource management or those interested in working in these particular areas.

#### **Program Requirements**

(4 courses; 18 quarter units)

PAD 640 Public FinancePAD 641 Local Government BudgetingPAD 642 Seminar in Public-Private FinancingPAD 643 Contract Negotiation in the Public Sector

# **Certificate Programs**

## Certificate in Alternative Dispute Resolution (Undergraduate)

(670-000-482) Faculty Advisor: Jack Hamlin • (858) 642-8405 • jhamlin@nu.edu

The successful completion of the ADR certificate program will provide students with the necessary skills to become effective negotiators, mediators, and facilitators. These skills are in high demand in the business community, local, state, and federal governments, and neighborhood communities.

Students who wish to pursue a baccalaureate degree or a second baccalaureate degree can apply some or all the academic credits awarded in the certificate program toward that degree, assuming they meet the GPA and other requirements of that degree program.

Employment and volunteer opportunities exist for mediators in both the private and government sectors such as:

- Ombudsperson for a corporation or university
- Education, teaching and training
- Human Resources Departments
- U.S. Military
- State Mediation and Conciliation Service (SMCS)
- State of California Department of Fair Employment and Housing
- San Diego City Attorney's Office
- Federal Mediation and Conciliation Service
- Equal Employment Opportunity Commission (EEOC)Mediation and Arbitration Private Practice
- Mediation and Arbitrat.
   Small Claims Courts
- Nonprofit Organizations and Community Mediation Programs
- Restorative Justice Program

#### **Certificate Requirements**

(6 courses; 27 quarter units)

To receive a Certificate in Alternative Dispute Resolution, students must complete four courses for the major and two electives from the courses listed below.

| ADR 400 | Alternative Dispute Resolution Processes |
|---------|--|
| ADR 405 | Negotiation Fundamentals                 |
| ADR 410 | Facilitation Fundamentals                |
| ADR 415 | Mediation Fundamentals                   |
|         |  |

#### Electives

Choose two of the following:

| ADR 420 | Communication and Conflict             |
|---------|--|
| ADR 425 | Cultural Issues in Conflict Management |
| ADR 430 | Ethics and Neutrality                  |

# • Graduate Certificate in Alternative Dispute Resolution

#### (770-000-898)

Faculty Advisor: Jack Hamlin • (858) 642-8405 • jhamlin@nu.edu

Expertise in Alternative Dispute Resolution is in high demand in the business community, local, state and federal governments, and neighborhood communities. The successful completion of the ADR certificate program will provide students with the necessary skills to become effective negotiators, mediators, and facilitators and to promote peace and understanding between diverse cultures.

Students who wish to pursue a master's degree can apply some or all the academic credits awarded in the certificate program toward that degree, assuming they meet the GPA and other requirements of that degree program.

Employment and volunteer opportunities exist for mediators in both the private and government sectors such as:

- Ombudsperson for a corporation or university
- Education, teaching and training
- Human Resources Departments
- U.S. Military
- State Mediation and Conciliation Service (SMCS)
- · State of California Department of Fair Employment and Housing
- San Diego City Attorney's Office
- Federal Mediation and Conciliation Service
- Equal Employment Opportunity Commission (EEOC)
- Mediation and Arbitration Private Practice
- Small Claims Courts
- Nonprofit Organizations and Community Mediation Programs
- Restorative Justice Program

#### **Certificate Requirements**

(6 courses; 27 quarter units)

To receive a Certificate in Alternative Dispute Resolution, students must complete four core courses and two electives from the courses listed below.

| ADR 600 | Alternative Dispute Resolution |
|---------|--------------------------------|
| ADR 605 | Negotiation                    |
| ADR 610 | Facilitation                   |
| ADR 615 | Mediation                      |
|         |                                |

#### Electives

Choose two of the following:

| ADR 620 | Arbitration        |
|---------|--------------------|
| ADR 625 | Crisis Negotiation |
| ADR 630 | Labor Negotiation  |

# Certificate in Criminal Justice Administration<sup>®</sup>

(670-000-466)

Faculty Advisor: James Larson • (858) 642-8418 • jlarson@nu.edu

This coursework and the accompanying credits may be transferred to appropriate degree programs if all other requirements for admission to a degree program are met.

This certificate provides students with an overview of some of the most important pillars of the criminal justice field. Students will gain insight into the principles, problems and solutions of supervision and management of personnel in the criminal justice agencies, the issues and theories surrounding the field of corrections, an understanding of the behavioral, psychological, sociological motivational factors of criminality and finally, a study of the intricacies within the judicial process of criminal justice.

#### **Certificate Requirements**

(4 courses; 18 quarter units)

| CJA 446 | Criminal Justice Management and Leadersh | ip |
|---------|--|----|
|---------|--|----|

- CJA 440 Corrections
- CJA 431 Criminology
- CJA 451 Court Systems and the Judicial Process

# Legal Assistance Certificate

(672-000-521)

Faculty Advisor: Marlene Amera Alhandy • (310) 662-2115 • malhandy@nu.edu

The Legal Assistance Certificate may serve as a starting point for students whose goal is to earn a baccalaureate degree. Students must complete 27 quarter units of general education courses. The coursework and the accompanying credits in this program may be transferred to the Bachelor of Science in Paralegal Studies if all other requirements for admission are met.

Note: No person shall practice law in California unless the person is an active member of the State Bar.

#### **Certificate Requirements**

(17 courses; 76.5 quarter units)

**Core Courses** 

(10 courses; 45 quarter units)

| PLA 301 | Legal Theory and Ethics   |
|---------|---------------------------|
| PLA 303 | Law Office Administration |

| PLA 305 | Property                        |
|---------|---------------------------------|
| PLA 306 | Torts                           |
| PLA 308 | Contracts                       |
| PLA 309 | Directed Research and Writing A |
| PLA 310 | Directed Research and Writing B |
| PLA 425 | Litigation I                    |
| PLA 318 | Remedies and Judgments          |
| PLA 324 | English for Professionals       |
|         |                                 |

#### **Specialty Concentrations**

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(4 courses; 18 quarter units)

(3 courses; 13.5 quarter units, for students choosing Litigation)

All students must take two of the two-course concentrations listed below. Students must take the level I and level II courses for each area. Students who select Litigation II will be required to take an additional elective because Litigation I is required in the major.

| PLA 407 | Family Law I                   |
|---------|--------------------------------|
| PLA 421 | Family Law II                  |
| PLA 426 | Litigation II                  |
|         | (Prerequisite: PLA 425)        |
| PLA 427 | Probate and Estate Planning I  |
| PLA 428 | Probate and Estate Planning II |
| PLA 429 | Corporations I                 |
| PLA 430 | Corporations II                |
|         | (Prerequisite: PLA 429)        |
| PLA 431 | Real Estate I                  |
| PLA 432 | Real Estate II                 |
|         | (Prerequisite: PLA 431)        |
| PLA 433 | Criminal Law I                 |
| PLA 434 | Criminal Law II                |

#### **Elective Courses**

(3 courses; 13.5 quarter units) (4 courses; 18 quarter units, for students who choose the Litigation concentration)

| PLA 302 | Computers and the Law              |
|---------|------------------------------------|
| PLA 404 | Wills, Trusts, and Estate Planning |
| PLA 407 | Family Law I                       |
| PLA 421 | Family Law II                      |
| PLA 311 | Internship                         |
| PLA 413 | Juvenile Law and Procedure         |
| PLA 314 | Workers' Compensation              |
| PLA 315 | Bankruptcy Law and Procedure       |
| PLA 316 | Entertainment Law                  |
| PLA 317 | Immigration Practice               |
| PLA 433 | Criminal Law I                     |
| PLA 434 | Criminal Law II                    |
| PLA 335 | Employment Law                     |
|         |                                    |

### Paralegal Specialist Certificate

(672-000)

Faculty Advisor: Marlene Amera Alhandy • (310) 662-2115 • malhandy@nu.edu

To be eligible for a Paralegal Specialist Certificate, a student must have completed a minimum of 90 transferable quarter units, an AA degree or a BA/BS degree prior to admission. Upon successful completion of the program, students earn the Paralegal Specialist Certificate in one of the following six areas of specialization:

Litigation Corporations Real Estate Law Probate and Estate Planning Criminal Law Family Law

Students may earn more than one Paralegal Specialist Certificate. Generally, any course completed for any one Paralegal Specialist Certificate need not be repeated

Each certificate is tailored to include training in substantive legal analysis, drafting of relevant legal documents, and managing of procedural matters. Each specialization requires the completion of 40.5 quarter units.

Note: No person shall practice law in California unless the person is an active member of the State Bar.

# ▲ Litigation Specialization

(672-000-515)

Faculty Advisor: Marlene Amera Alhandy • (310) 662-2115 • malhandy@nu.edu

This certificate covers case analysis, legal research, drafting of pleadings, motion and discovery documents, evidence law, and preparation of civil cases for trial.

#### **Certificate Requirements**

(9 courses; 40.5 quarter units)

| PLA 301<br>PLA 303<br>PLA 306<br>PLA 308 | Legal Theory and Ethics<br>Law Office Administration<br>Torts<br>Contracts |
|--|--|
| PLA 309                                  | Directed Research and Writing A  |
| PLA 324                                  | English for Professionals  |
| PLA 425                                  | Litigation I   |
| PLA 426                                  | Litigation II  |
|  | (Prerequisite: PLA 425)  |
| PLA 318                                  | Remedies and Judgments   |
|  | -  |

### ▲ Corporations Specialization

(672-000-516)

Faculty Advisor: Marlene Amera Alhandy  ${\scriptstyle \bullet}$  (310) 662-2115  ${\scriptstyle \bullet}$  malhandy@nu.edu

This certificate covers case analysis, legal research, and preparation of documents for the formation and management of the corporate entity, including regulation of securities, acquisitions, and mergers.

#### **Certificate Requirements**

(9 courses; 40.5 quarter units)

| PLA 301 | Legal Theory and Ethics         |
|---------|---------------------------------|
| PLA 303 | Law Office Administration       |
| PLA 305 | Property                        |
| PLA 308 | Contracts                       |
| PLA 309 | Directed Research and Writing A |
| PLA 318 | Remedies and Judgments          |
| PLA 429 | Corporations I                  |
| PLA 430 | Corporations II                 |
|         | (Prerequisite: PLA 429)         |
| PLA 324 | English for Professionals       |

# Real Estate Law Specialization

(672-000-517) Faculty Advisor: Marlene Amera Alhandy • (310) 662-2115 • malhandy@nu.edu

This certificate covers case analysis, legal research, analysis and preparation of documents involving leases, sale of property, real estate syndications, condominiums, zoning, and other related matters.

#### **Certificate Requirements**

(9 courses; 40.5 quarter units)

| PLA 301 | Legal Theory and Ethics         |
|---------|---------------------------------|
| PLA 303 | Law Office Administration       |
| PLA 305 | Property                        |
| PLA 308 | Contracts                       |
| PLA 309 | Directed Research and Writing A |
| PLA 318 | Remedies and Judgments          |
| PLA 431 | Real Estate I                   |
| PLA 432 | Real Estate II                  |
|         | (Prerequisite: PLA 431)         |
| PLA 324 | English for Professionals       |

# ▲ Probate and Estate Planning Specialization

#### (672-000-518)

Faculty Advisor: Marlene Amera Alhandy • (310) 662-2115 • malhandy@nu.edu

This certificate covers case analysis, legal research, preparation of documents, including wills and trusts, and handling administration of decedent's estate, including tax matters.

#### **Certificate Requirements**

(9 courses; 40.5 quarter units)

# ▲ Criminal Law Specialization

(672-000-519)

Faculty Advisor: Marlene Amera Alhandy • (310) 662-2115 • malhandy@nu.edu

This certificate covers the prosecution of criminal defendants and their defense, whether in public or private practice.

#### **Certificate Requirements**

(9 courses; 40.5 quarter units)

| PLA 301 | Legal Theory and Ethics         |
|---------|---------------------------------|
| PLA 306 | Torts                           |
| PLA 407 | Family Law I                    |
| PLA 309 | Directed Research and Writing A |
| PLA 310 | Directed Research and Writing B |
| PLA 413 | Juvenile Law and Procedure      |
| PLA 433 | Criminal Law I                  |
| PLA 434 | Criminal Law II                 |
| PLA 324 | English for Professionals       |
|         |                                 |

# ▲ Family Law Specialization

#### (672-000-520)

Faculty Advisor: Marlene Amera Alhandy • (310) 662-2115 • malhandy@nu.edu

This certificate covers case analysis, legal research, analysis, and preparation of family law pleadings involving dissolution of marriage, paternity actions, domestic violence actions, adoptions, and other related matters.

#### **Certificate Requirements**

(9 courses; 40.5 quarter units)

- PLA 301 Legal Theory and Ethics
- PLA 303 Law Office Administration
- PLA 404 Wills, Trusts, and Estate Planning
- PLA 305 Property PLA 309 Directed Resea
- PLA 309Directed Research and Writing APLA 413Juvenile Law and Procedure
- PLA 425 Litigation I
- PLA 407 Family Law I
- PLA 421 Family Law II

Interim Dean, **Wali Mondal,** Ph.D. Agriculture, Economics and Rural Sociology Ohio State University

| Degrees Offered               | 126 |
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The University of Values

# Degree Programs Offered

# **Undergraduate Degrees**

#### **Bachelor of Arts**

with Majors in: Management & with Concentrations in: Alternative Dispute Resolution Business Law Economics Entrepreneurship Hospitality and Casino Management Human Resource Management Marketing Sports Management Marketing %

#### Bachelor of Business Administration

with Concentrations in: Accountancy & Alternative Dispute Resolution Business Law Economics & Entrepreneurship Finance & Hospitality and Casino Management & Human Resource Management & Marketing & Sports Management &

#### **Bachelor of Science**

with Majors in: Accountancy Financial Management Organizational Leadership

#### Minors

Accountancy & Business Administration Business Studies Economics &

# **Transition Programs**

BA MGT/MA MGT Program BBA/MBA Program BBA/MS TM Program BS Accountancy/MBA Program

## **Graduate Degrees**

#### Executive Master of Business Administration

Executive Master of Business Administration (Spanish Version)∕∂

#### Master of Arts

with Fields of Study in: Human Resource Management<sup>4</sup> with Areas of Specialization in: Organizational Development and Change Management<sup>4</sup> Organizational Leadership<sup>4</sup> Management<sup>4</sup> with an Area of Specialization in: Organizational Leadership<sup>4</sup>

#### Master of Business Administration ~

with Areas of Specialization in: Accountancy 'd Alternative Dispute Resolution Electronic Business 'd Financial Management 'd Health Care Administration Human Resource Management 'd International Business 'd Marketing 'd Organizational Leadership 'd Technology Management 'd

#### Master of Science

with Fields of Study in: Corporate and International Finance Electronic Business<sup>o</sup>t Knowledge Management Organizational Leadership<sup>o</sup>t

### **Certificate Programs**

Accountancy Finance Hospitality and Casino Management Human Resource Management International Business Marketing Sports Management

A denotes program also offered or partially offered online.

Note: Not all online programs or courses are offered in entirety via Internet. Note: Not all courses or programs listed in this catalog are available at every campus.

Various undergraduate minors are available in some degree programs.

FOR FURTHER INFORMATION

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fax: (858) 642-8716

e-mail: sobm@nu.edu

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# Vision Statement

The vision of the School of Business and Management is to build a learning community of educators, scholars, and students who are people of integrity, with competitive knowledge, with the capacity for innovation, and with cultural sophistication who are recognized for their capable, purposeful, and ethical leadership in a changing world.

# **Mission Statement**

The mission of the School of Business and Management is to provide nontraditional as well as traditional students with flexible access to relevant business and professional education, in order to enhance their opportunities as ethical, effective, and knowledgeable leaders in a global economy. Programs provide rigor, currency, and continuous improvement and are delivered by a faculty that synthesizes its scholarly activity and practitioner experience into an optimal blend of theory and practice.

# **Undergraduate Degrees**

# BACHELOR OF ARTS

(610) General Education Program Requirements

The general education program consists of a minimum of 70.5 quarter units. Of the 70.5 units, students must complete at least 4.5 units at the upper-division level and 4.5 units in diversity enriched coursework. A plus [+] indicates a diversity enriched offering. All undergraduate students working toward any associate or bachelor's degree must meet the University diversity requirement.

National University has general education requirements in the following eight areas:

#### AREA A: ENGLISH COMMUNICATION

(Minimum 15 quarter units)

# AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

#### AREA C: INFORMATION LITERACY

(Minimum 4.5 quarter units)

#### AREA D: ARTS AND HUMANITIES

(Minimum 13.5 quarter units)

#### AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(Minimum 13.5 quarter units)

#### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(Minimum 6 quarter units required [Note: one science lab is required])

#### AREA G: MODERN LANGUAGE

(Minimum 9 quarter units)

See General Education section of the catalog for applicable courses. Students enrolled in a degree program under the School of Business and Management can elect to take general education electives to fulfill this requirement.)

#### **AREA A-G: GENERAL EDUCATION**

(Minimum 4.5 quarter units)

Courses taken to achieve minimum levels of collegiate-level competency in the areas of writing and mathematical concepts and systems do not satisfy any portion of the general education requirement.

# ◆ Major in Management ∕<sup>⊕</sup>

#### (610-413)

Faculty Advisor: Iraj Mahdavi • (858) 642-8374 • imahdavi@nu.edu

The Bachelor of Arts in Management provides students a businessrelated degree with an emphasis on managing organizations and personnel in a multicultural and global setting. To achieve maximum flexibility, the major in management program minimizes prerequisites, enabling students to take the required courses in any sequence. Students are also offered several areas of concentration.

#### Bachelor of Arts in Management / Master of Arts in Management (BA MGT / MA MGT) Transition Program

Students who are currently enrolled in the Bachelor of Arts in Management program, have at least a cumulative GPA of 3.0, and are within six courses of graduation may register for the Bachelor of Arts in Management/Master of Arts in Management (BA MGT/MA MGT) transition program.

Students in the BAMGT transition program may take up to two MA MGT classes as electives during the BA MGT. The two courses are: MGT 601 and LED 601.

Students must complete graduate-level coursework taken as part of the BAMGT degree with a grade of B or better. This coursework, which counts as electives, will not transfer as graduate-level credit to National University or any other institution as it is part of an undergraduate degree program. Grades earned in graduate level courses will be calculated as part of the student's undergraduate grade point average. Students must apply for and begin the MA MGT program within six months after completing their final BAMGT course. Students must complete their MA MGT program within four years with no break exceeding 12 months.

The number of courses required to earn an MA/MGT degree for transition program students is reduced from 12 to as few as 10 courses, depending on classes selected and grades earned.

#### **Program Outcomes**

Upon successful completion of this program, students will be able to:

- Describe the basic functions of management and their practical implications.
- Analyze and evaluate management, leadership, and motivation theories.
- Identify organizational behavior, communications, and change theories and their practical implications.
- Explain the effect of international business environmental factors (legal, economic, and cultural) on the conduct of global business.
- Explain the principles and theories of ethical decision-making and their practical implications in the everyday conduct of business.

#### **Degree Requirements**

To receive a Bachelor of Arts in Management, students must complete at least 180 quarter units as described below, 76.5 of which must be completed at the upper-division level and 45 of which must be completed in residence at National University. In absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Refer to the section of

undergraduate admission procedures for specific information regarding admission and evaluation.

#### Preparation for the Major

(3 courses; 13.5 quarter units)

| ECO 203 | Principles of Microeconomics* |
|---------|-------------------------------|
| ECO 204 | Principles of Macroeconomics* |
| LAW 304 | Legal Aspects of Business I   |

\*May be used to satisfy general education requirements.

#### **Requirements for the Major**

(9 courses; 40.5 quarter units)

| ODV 420  | Introduction to Organizational Behavior                        |
|----------|--|
| BKM 400  | Business Knowledge Management Strategies                       |
| MGT 409C | Principles of Management and Organization                      |
| MGT 400  | Ethics in Law, Business and Management                         |
| HRM 409B | Survey in Human Resources Management and                       |
|          | Organization Development                                       |
| MKT 402A | Marketing Fundamentals   |
| MGT 430  | Survey of Global Business                                      |
|          | (Prerequisites: ECO 203 and ECO 204)                           |
| LED 400  | Introduction to Leadership                                     |
| BUS 480  | Integrated Business Policy (capstone course)                   |
|          | (Prerequisites: At least nine (9) preparation or core courses) |

#### **Upper-Division Electives**

(6 courses; 27 quarter units)

Students may choose to take any one of the concentrations listed below or appropriate elective courses to satisfy the total upperdivision units for the degree in the following prefix areas: ACC, BKM, ECO, FIN, HRM, LAW, MGT, MKT, MNS, LED, and ODV.

# ▲ Concentration in Alternative Dispute Resolution

#### (185)

Faculty Advisor: Jack Hamlin • (858) 642-8405 • jhamlin@nu.edu

This concentration is designed for those students majoring in business administration or management who may seek entry into the Alternative Dispute Resolution (ADR) field. ADR is in high demand in the business community, local, state and federal governments, and neighborhood communities. The successful completion of the ADR program will provide students with the necessary skills to become effective negotiators, mediators and facilitators and to promote peace and understanding between diverse cultures.

#### **Requirements for the Concentration**

(4 courses; 18 quarter units)

| Choose any | ı four | of the | folla | wing: |
|------------|--------|--------|-------|-------|
|------------|--------|--------|-------|-------|

- ADR 400 Alternative Dispute Resolution Processes
- ADR 405 Negotiation Fundamentals
- ADR 410 Facilitation Fundamentals
- ADR 415 Mediation Fundamentals
- ADR 420 Communication and Conflict
- ADR 425 Cultural Issues in Conflict Management
- ADR 430 Ethics and Neutrality

#### Concentration in Business Law

#### (484)

Faculty Advisor: Jack Hamlin • (858) 642-8405 • jhamlin@nu.edu

This concentration is designed for students undertaking the Bachelor of Arts in Management or BBA degree. The concentration will provide students who have an interest in a career in law, business, or government, with an understanding of the complex legal issues that exist in today's business environment.

#### **Requirements for the Concentration**

(6 courses; 27 quarter units)

| LAW 400 | Current Legal Issues                    |
|---------|---|
| LAW 304 | Legal Aspects of Business I             |
| LAW 305 | Legal Aspects of Business II            |
|         | (Prerequisite: LAW 304)                 |
| MGT 400 | Ethics in Law, Business, and Management |
| ADR 400 | Alternative Dispute Processes           |
| ADR 405 | Negotiation Fundamentals                |

### Concentration in Economics

(480)

Faculty Advisor: Brian P. Simpson • (858) 642-8431 • bsimpson@nu.edu

This concentration is designed for those students who seek to gain specialized knowledge in the field of economics. This concentration emphasizes market process (or free market) economics. Economics prepares students for careers in business, government, and nonprofit organizations. Economics also provides very good preparation for graduate level work, including in business, law, public policy, and public administration.

Knowledge of economics can increase one's earning potential relative to other academic fields (including business and management). According to a U.S. Department of Commerce report, those with undergraduate economic degrees are among the highest paid workers placing third out of fifteen academic fields (behind only engineering and agriculture/forestry). By concentrating in economics, students can take advantage of some of the increased earnings potential that economics makes possible.

For guidance and recommendations concerning the concentration in economics, please contact the above-named Faculty Advisor.

#### **Requirements for the Concentration**

(5 courses; 22.5 quarter units)

Students must successfully complete five of the following courses for a concentration in economics, completing three of them in residence at National University. Three of the five courses completed for the concentration must be ECO 401, 402, and ECO 430. It is recommended that students take the courses needed for the concentration in economics toward the end of their program.

| ECO 401 | Market Process Economics I  |
|---------|-----------------------------|
| ECO 402 | Market Process Economics II |
| ECO 430 | Economics and Philosophy    |

#### Plus any two of the following

| ECO 447 | Money and Banking               |
|---------|---------------------------------|
|         | (Prerequisite: ECO 203 and 204) |
| ECO 415 | Labor Economics                 |
|         | (Prerequisite: ECO 203 and 204) |
| ECO 420 | International Economics         |
|         | (Prerequisite: ECO 203 and 204) |

#### Concentration in Entrepreneurship

#### (487)

Faculty Advisor: Bruce Buchowicz • (858) 642-8439 • bbuchowicz@nu.edu

This concentration is designed for those students who seek to gain practical knowledge in starting, managing, or running a business. The concentration is aimed at providing students with the specialized knowledge of entrepreneurship, e-business, small business management, and family business. Entrepreneurship is one of the core concentrations in many schools of business. Completing this concentration will enable students to compete in the marketplace for employment or to start new business ventures.

According to the U.S. Department of Commerce, California is a leader in small business and family business. This concentration will enable students to gain knowledge on various aspects of small business and family business including venture capital, risk management, registration of new business, security issues, bankruptcy, estate planning, and philanthropy. This knowledge, combined with knowledge gained in the Bachelor of Arts in Management program will significantly enhance the earning potential of a student.

Students are strongly advised to contact the above-named Faculty Advisor for guidance and recommendations regarding academic preparation for this concentration.

#### **Program Outcomes**

Upon successful completion of this program, students will be able to:

- Identify the origin and development of entrepreneurship.
- Analyze risk taking and innovation.
- Describe marketing of goods and services.
- Comprehend financial plan and control of small business.
- · Apply the basics of e-commerce through technology.
- Analyze e-commerce servers and clients.
- Distinguish family business from other forms of business.
- Examine the impact of family business both nationally and globally.

#### **Requirements for the Concentration**

(4 courses; 18 quarter units)

| Students must successfully complete the following four courses: |                                 |  |
|---|---------------------------------|--|
| MGT 481   | Foundations of Entrepreneurship |  |
| MGT 482   | Small Business Management       |  |
| MGT 483   | E-Business                      |  |

MGT 484 Family Business Management

# ▲ Concentration in Hospitality and Casino Management

# (479)

Faculty Advisor: Michael Pickett • (858) 642-8374 • mpickett@nu.edu

This concentration is designed for those majoring in management who seek entry or advancement in the management of hospitality and casino industries. There is a wide and growing range of opportunities for graduates including management, marketing and community relations in hotels, restaurants, tourism facilities, and visitor's bureaus.

#### **Requirements for the Concentration**

(7 courses; 31.5 quarter units)

| SMG 432 | Principles of Leisure Services Management       |
|---------|---|
| HCM 400 | Principles of Hospitality and Casino Accounting |
| HCM 430 | Principles of Hospitality and Casino Staffing   |
| HCM 450 | Native American Tribal Community Development    |
| HCM 440 | Cultural Diversity and Hospitality Management   |
| HCM 420 | Hospitality and Casino Marketing                |
| HCM 410 | Hospitality and Gaming Law                      |

# ▲ Concentration in Human Resource

# Management

(470)

Faculty Advisor: Bernadette Baum • (858) 642-8404 • bbaum@nu.edu

This concentration provides education, knowledge and skills that apply to every level of an organization. This degree program is excellent preparation for students attracted to a career in the increasingly important field of human resource management.

#### **Requirements for the Concentration**

(6 courses, 27 quarter units)

Students must successfully complete the following courses for a concentration in human resource management. Students must complete at least four of the courses in residence at National University. It is recommended that students take these courses in the order listed below at or near the end of their program after completing the upper-division BA/Management core courses.

#### **Requirements for the Concentration**

(6 courses; 27 quarter units)

- HRM 432 Recruiting, Selection, Promotion, and Retention
- HRM 433 Pay and Benefit Administration, and HR Technology
- HRM 439 Legal, Regulatory, and Labor Relation Concerns in HRM

ODV 410 Organizational Development, Career Systems, and Training and Development

and two upper-division elective courses in the following prefix areas: HRM, LED and ODV.

# ▲ Concentration in Marketing

#### (469)

Faculty Advisor: Ramon Corona • (858) 642-8427 • rcorona@nu.edu

This concentration is organized around a managerial framework that gives students an understanding of the concepts of marketing as well as the application of these concepts in making decisions and managing marketing activities. There is a wide range of opportunities in marketing, including marketing management, marketing research, purchasing manager/buyer, market analysis, product/branch manager, retailing, sales promotion, and international marketing.

Students must successfully complete the following courses for a concentration in marketing, completing at least four of them in residence at National University. It is recommended that students take these courses at or near the end of their program after completing the upper-division BBA major courses.

#### **Requirements for the Concentration**

(6 courses; 27 quarter units)

- MKT 420 Principles of Consumer Behavior (Prerequisite: MKT 402A)
- MKT 430 Introduction to Global Marketing (Prerequisite: MKT 402A)
- MKT 434 Introduction to Market Research (*Prerequisite: MKT* 402A)
- MKT 443 Introduction to Advertising (Prerequisite: MKT 402A)

#### Plus any two of the following courses:

MKT 440A Sales Techniques and Methodology (Prerequisite: MKT 402A)

- MKT 441 Channel and Value Networks (Prerequisite: MKT 402A)
- MKT 442A Introduction to Public Relations (Prerequisite: MKT 402A)
- MKT 445 E-Marketing (Prerequisite: MKT 402A)
- MKT 446 Introduction to Services Marketing (Prerequisite: MKT 402A)
- MKT 447 Marketing for Entrepreneurs (Prerequisite: MKT 402A)

# ▲ Concentration in Sports Management

(259)

Faculty Advisor: George Drops • (858) 642-8438 • gdrops@nu.edu

This concentration is designed for those students majoring in business management who may seek entry into management and marketing in the specialized fields of the sports and fitness industries. There is a wide range of opportunities in sports management including professional sports, university and college athletic programs, high school athletics, fitness centers, golf and tennis clubs, sports instruction centers, leisure and recreational facilities, and allied businesses.

#### **Requirements for the Concentration**

#### (6 courses; 27 quarter units)

- SMG 430 Introduction to Sports Management
- SMG 432 Principles of Leisure Services Management
- SMG 433 Sports Financial Management
- SMG 434 Principles and Problems of Coaching
- SMG 435 Legal Aspects of Sports Administration
- SMG 436 Sports Marketing and Promotions

### Major in Marketing

(610-415)

Faculty Advisor: Ramon Corona • (858) 642-8427 • rcorona@nu.edu

The Bachelor of Arts in Marketing provides learners with a solid foundation in strategic marketing concepts focused on the application of marketing theory and practice in the global marketplace. Emphasis is placed on the development of technical marketing skills and knowledge, strategic planning and decision making, relevant use of technology, and communication throughout the global community.

#### **Degree Requirements**

To receive a BA in Marketing, students must complete at least 180 quarter units as described below, 76.5 of which must be completed at the upper-division level and 45 of which must be completed in residence at National University. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Refer to the section of undergraduate admission procedures for specific information regarding admission and evaluation.

#### **Program Outcomes**

Upon completion of this program, students will be able to:

- Write effective marketing documents such as: reports, press releases, and research findings.
- Orally present marketing information in a group setting.
- Examine the ethical implications of marketing activities.
- Explain required changes within key marketing components necessary to improve the attractiveness of a given offering.
- Explain the challenges and rewards of the global marketplace.

#### Preparation for the Major

(5 courses; 22.5 quarter units)

| ACC 201     | Financial Accounting Fundamentals                  |
|-------------|--|
| ACC 202     | Managerial Accounting Fundamentals                 |
|             | (Prerequisite: ACC 201)                            |
| ECO 203     | Principles of Microeconomics*                      |
| ECO 204     | Principles of Macroeconomics*                      |
| MNS 205     | Introduction to Quantitative Methods for Business* |
|             | (Prerequisite: Placement Evaluation)               |
| * May be us | sed to satisfy general education requirements.     |
|             |  |
|             |  |

#### **Requirements for the Major**

(12 courses; 54 quarter units)

MKT 402A Marketing Fundamentals

| MKT 420  | Principles of Consumer Behavior<br>(Prerequisite: MKT 402A)   |
|----------|---|
| MKT 430  | Introduction to Global Marketing<br>(Prerequisite: MKT 402A)  |
| MKT 434  | Introduction to Market Research<br>( <i>Prerequisite: MKT</i> 402 <i>A</i> )  |
| MKT 440A | Sales Techniques and Methodology<br>(Prerequisite: MKT 402A)  |
| MKT 441  | Channel and Value Networks<br>(Prerequisite: MKT 402A)  |
| MKT 442A | Introduction to Public Relations<br>( <i>Prerequisite: MKT 402A</i> )   |
| MKT 443  | Introduction to Advertising<br>(Prerequisite: MKT 402A)   |
| MKT 445  | E-Marketing<br>(Prerequisite: MKT 402A)   |
| MKT 446  | Introduction to Services Marketing<br>(Prerequisites: MKT 402A)   |
| MKT 448  | Not for Profit Marketing<br>(Prerequisite: MKT 402A)  |
| MKT 480  | Marketing Capstone<br>(Prerequisite: MKT 402A and completion of 31.5 quarter<br>units of upper-division major requirements) |

MKT 402A is eligible for credit-by-exam waiver.

If students plan to do an internship, it is strongly recommended that they take BUS 491 as an elective.

#### **Upper-Division Electives**

#### (4 courses; 18 quarter units)

Please select any upper-division course from the School of Business and Management.

# ■ BACHELOR OF BUSINESS ADMINISTRATION √<sup>®</sup>

#### (630)

Faculty Advisor: Ramon Corona • (858) 642-8427 • rcorona@nu.edu

The Bachelor of Business Administration (BBA) degree prepares students for career opportunities and advancement in business and industry. Successful completion of lower- and upper-division BBA requirements ensures that graduates comprehend the relationships among marketing, quantitative theory, accountancy, economic principles and financial, human and organizational management. The BBA gives students an opportunity to specialize in designated fields by pursuing concentrations and minors, or to choose an individualized set of general BBA electives.

#### **Transition Programs**

Two transition programs are available to students in the Bachelor of Business Administration (BBA) degree who meet certain requirements as specified below:

### BBA/Master Business Administration (MBA) Transition Program

#### BBA/Master of Science in Electronic Business (MSEB) Transition Program

Students must complete graduate-level coursework taken as part of the BBA degree with a grade of B or better. This coursework, which counts as electives, will not transfer as graduate-level credit to National University or any other institution as it is part of an undergraduate degree program. Grades earned in graduate level courses will be calculated as part of the student's undergraduate grade point average. Students must be within completing their last six courses in their undergraduate program and have a cumulative

GPA of at least a 3.00 to be eligible. Lastly, students must apply for and begin the MBA or MSEB program within six months after completing their final BBA course. Students must complete their MBA or MSEB program within four years with no break exceeding 12 months.

#### Bachelor of Business Administration/Master of Business Administration (BBA/MBA) Transition Program

Students in the BBA transition program may take up to three MBA classes as electives during the BBA. Students may choose from the following courses: MKT 602, LED 601, ELB 620, and BKM 600.

The number of courses required to earn an MBA degree for transition program students is reduced from 14 to as few as 11 courses, depending on classes selected and grades earned.

# Bachelor of Business Administration/Master of Science in Electronic Business (BBA/MSEB) Transition Program

Students in the BBA transition program may take up to two MSEB classes as electives during the BBA. Students may choose take ELB 620 and one of the following two courses: ELB 621 or ELB 624.

The number of courses required to earn an MSEB degree for transition program students is reduced from 12 to as few as 10 courses, depending on classes selected and grades earned.

#### **Program Outcomes**

Upon successful completion of this program, students will be able to:

- Comprehend and apply the principles of business ethics
- Obtain the quantitative skills and knowledge needed to make sound business decisions
- Acquire knowledge in the fields of business, including management, international business, marketing, business law, accountancy, finance, economics, and knowledge management, and apply these skills to different business environments
- Integrate the knowledge acquired in the program to analyze a business to identify its strengths and weaknesses and determine what changes can be made for improvement
- Conduct independent research relevant to business-related issues
- Demonstrate written and oral presentation skills expected of a business school graduate

#### **Degree Requirements**

To receive a BBA, students must complete at least 180 quarter units as described below, 76.5 of which must be completed at the upperdivision level and 45 of which must be completed in residence at National University. (In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree.) Refer to the section of undergraduate admission procedures for specific information regarding admission and evaluation.

#### **General Education Program Requirements**

The general education program consists of a minimum of 70.5 quarter units. Of the 70.5 units, students must complete at least 4.5 units at the upper-division level and 4.5 units in diversity enriched coursework. A plus [+] indicates a diversity enriched offering. All undergraduate students working toward any associate or bachelor's degree must meet the University diversity requirement. National University has general education requirements in the following eight areas: AREA A: ENGLISH COMMUNICATION

(Minimum 15 quarter units)

# AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

### AREA C: INFORMATION LITERACY

(Minimum 4.5 quarter units)

#### AREA D: ARTS AND HUMANITIES

(Minimum 13.5 quarter units)

**AREA E: SOCIAL AND BEHAVIORAL SCIENCES** (Minimum 13.5 quarter units)

AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(Minimum 6 quarter units required [Note: one science lab is required])

#### AREA G: MODERN LANGUAGE

(Minimum 9 quarter units) See General Education section of the catalog for applicable courses.

(Students enrolled in a degree program under the School of Business and Management can elect to take general education electives to fulfill this requirement.)

#### AREA A-G: GENERAL EDUCATION

(Minimum 4.5 quarter units)

Courses taken to achieve minimum levels of collegiate-level competency in the areas of writing and mathematical concepts and systems do not satisfy any portion of the general education requirement.

#### Preparation for the Major

(6 courses; 27 quarter units)

| MNS 205 | Introduction to Quantitative Methods for Business* |
|---------|--|
|         | (Prerequisite: Placement Evaluation)               |
| ECO 203 | Principles of Microeconomics*                      |
| ECO 204 | Principles of Macroeconomics*                      |
| ACC 201 | Financial Accounting Fundamentals                  |
| ACC 202 | Managerial Accounting Fundamentals                 |
|         | (Prerequisite: ACC 201)                            |
| LAW 304 | Legal Aspects of Business I                        |
|         |  |

\* May be used to satisfy general education requirements.

#### **Requirements for the Major**

(8 courses; 36 quarter units)

| BKM 400  | Business Knowledge Management Strategies               |
|----------|--|
| MGT 409C | Principles of Management and Organization              |
| FIN 310  | Business Finance                                       |
|          | (Prerequisite: ACC 201)                                |
| MNS 407  | Management Science                                     |
|          | (Prerequisite: MNS 205)                                |
| MKT 402A | Marketing Fundamentals                                 |
| MGT 430  | Survey of Global Business                              |
|          | (Prerequisites: ECO 203 and ECO 204)                   |
| MGT 451  | Production and Operations Management I                 |
| BUS 480  | Integrated Business Policy (Capstone Course)           |
|          | (Prerequisites: At least nine BBA preparation and core |
|          | courses)   |

#### **Upper-Division Electives**

(8 courses; 36 quarter units)

Students may choose to take one of the BBA Concentrations listed below, and/or appropriate elective courses to satisfy the total units for the degree with the following prefixes: ACC, BKM, BUS, ECO, FIN, HRM, LAW, LED, MGT, MKT, ODV, or HUB.

#### **Recommended Electives**

| BUS 491  | Internship Project                                 |
|----------|--|
| FIN 446  | International Financial Management                 |
|          | (Prerequisites: FIN 310)                           |
| FIN 440  | Financial Institutions                             |
|          | (Prerequisite: FIN 310)                            |
| HRM 409B | Survey in Human Resources Management and           |
|          | Organization Development                           |
| HRM 432  | Recruiting, Selection, Promotion, and Retention    |
| HRM 439  | Legal, Regulatory, and Labor Relations Concerns in |
|          | HRM  |
| LAW 305  | Legal Aspects of Business II                       |
|          | (Prerequisite: LAW 304)                            |
| MGT 400  | Ethics in Law, Business and Management             |
| MGT 442  | Strategic Business Management                      |
| MKT 430  | Introduction to Global Marketing                   |
|          | (Prerequisite: MKT 402A)                           |
| MKT 434  | Introduction to Market Research                    |
|          | (Prerequisite: MKT 402A)                           |
| MKT 443  | Introduction to Advertising                        |
|          | (Prerequisite: MKT 402A)                           |
|          |  |

### ▲ Concentration in Accountancy ℃

#### (472)

Faculty Advisor: Connie Fajardo • (916) 855-4137 • cfajardo@nu.edu

This concentration is designed for those majoring in business administration with its broad base of business-related disciplines, but who also wish to gain the intermediate-level accounting knowledge and skills appropriate for careers in the accounting and finance departments of a business, nonprofit, or government entity.

Students are encouraged to seek a nationally recognized accounting designation such as the CMA (Certified Management Accountant) or CFM (Certified in Financial Management). Those who are considering a CPA designation (Certified Public Accountant) are best served by enrolling in the B.S. in accountancy degree program.

Students are strongly advised to contact the above-named Faculty Advisor for guidance and recommendations as to academic preparation that will best meet their career objectives.

Students must successfully complete the following courses for a concentration in accountancy and must have successfully completed ACC 201 before enrolling in any of these courses:

#### **Requirements for the Concentration**

(6 courses; 27 quarter units)

| ACC 410A | Intermediate Accounting I  |
|----------|----------------------------|
|          | (Prerequisite: ACC 201)    |
| ACC 410B | Intermediate Accounting II |
|          | (Prerequisite: ACC 201)    |

#### Plus any four of the following courses:

| ACC 410C | Intermediate Accounting III |
|----------|-----------------------------|
|          | (Prerequisite: ACC 201)     |
| ACC 431  | Advanced Accounting         |
|          | (Prerequisite: ACC 201)     |

| ACC 432A | Taxation - Individual               |
|----------|-------------------------------------|
|          | (Prerequisite: ACC 201)             |
| ACC 432B | Taxation - Business                 |
|          | (Prerequisite: ACC 201)             |
| ACC 433A | Managerial Accounting I             |
|          | (Prerequisite: ACC 201)             |
| ACC 433B | Managerial Accounting II            |
|          | (Prerequisite: ACC 433A)            |
| ACC 434  | Government and Nonprofit Accounting |
|          | (Prerequisite: ACC 201)             |
| ACC 435A | Auditing I                          |
|          | (Prerequisite: ACC 201)             |
| ACC 435B | Auditing II                         |
|          | (Prerequisite: ACC 435A)            |
|          |                                     |

### Concentration in Alternative Dispute Resolution

(185)

Faculty Advisor: Jack Hamlin • (858) 642-8405 • jhamlin@nu.edu

This concentration is designed for those students majoring in business administration who may seek entry into the Alternative Dispute Resolution field. ADR is in high demand in the business community, local, state and federal governments, and neighborhood communities. The successful completion of the ADR program will provide students with the necessary skills to become effective negotiators, mediators and facilitators and to promote peace and understanding between diverse cultures.

#### **Requirements for the Concentration**

(4 courses; 18 quarter units)

Choose any four of the following:

| ADR 400 | Alternative Dispute Resolution Processes |  |
|---------|--|--|
|---------|--|--|

| ADR 405 | Negotiation | Fundamentals |  |
|---------|-------------|--------------|--|
|         |             |              |  |

| ADR 410 | Facili | tation F | undar | nentals |
|---------|--------|----------|-------|---------|
|         |        |          |       |         |

ADR 415 Mediation Fundamentals

ADR 420 Communication and Conflict

ADR 425 Cultural Issues in Conflict Management

ADR 430 Ethics and Neutrality

### ▲ Concentration in Business Law

(484)

Faculty Advisor: Jack Hamlin • (858) 642-8405 • jhamlin@nu.edu

This concentration is designed for students undertaking the Bachelor of Business Administration (BBA) or BA Management (BAM) degree. The concentration will provide students who have an interest in a career in law, business or government, with an understanding of the complex legal issues that exist in today's business environment.

#### **Requirements for the Concentration**

(6 courses; 27 quarter units)

Choose six courses from the following:

| LAW 400<br>LAW 304<br>LAW 305 | Current Legal Issues<br>Legal Aspect of Business I<br>Legal Aspect of Business II |
|-------------------------------|---|
|                               | (Prerequisite: LAW304)  |
| LAW 440                       | Comparative International Law   |
| LAW 445                       | Administrative Law for Business   |
| LAW 455                       | Public Contracting  |
| ADR 400                       | Alternative Dispute Processes   |
| ADR 405                       | Negotiation Fundamentals  |

# ▲ Concentration in Economics <sup>(†)</sup>

#### (480)

Faculty Advisor: Brian P. Simpson • (858) 642-8431 • bsimpson@nu.edu

This concentration is designed for those students who seek to gain specialized knowledge in the field of economics. This concentration emphasizes market process (or free market) economics. Economics prepares students for careers in business, government, and nonprofit organizations. Economics also provides very good preparation for graduate level work, including in business, law, public policy, and public administration.

Knowledge of economics can increase one's earning potential relative to other academic fields (including business and management). According to a U.S. Department of Commerce report, those with undergraduate economic degrees are among the highest paid workers. They place third out of fifteen academic fields (behind only engineering and agriculture/forestry). By concentrating in economics, students can take advantage of some of the increased earnings potential that economics makes possible.

For guidance and recommendations concerning the concentration in economics, please contact the above-named Faculty Advisor.

#### **Requirements for the Concentration**

(5 courses; 22.5 quarter units)

Students must successfully complete five of the following courses for a concentration in economics. Students must complete at least three of the courses in residence at National University. Three of the five courses completed for the concentration must be ECO 401, 402, and ECO 430. It is recommended that students take the courses needed for the concentration in economics at or near the end of their program.

| ECO 401 | Market Process Economics I  |
|---------|-----------------------------|
| ECO 402 | Market Process Economics II |
| ECO 430 | Economics and Philosophy    |

#### Plus any two of the following

| ECO 447 | Money and Banking               |
|---------|---------------------------------|
|         | (Prerequisite: ECO 203 and 204) |
| ECO 415 | Labor Economics                 |
|         | (Prerequisite: ECO 203 and 204) |
| ECO 420 | International Economics         |
|         | (Prerequisite: ECO 203 and 204) |

### ▲ Concentration in Entrepreneurship

#### (487)

Faculty Advisor: Bruce Buchowicz • (858) 642-8439 • bbuchowicz@nu.edu

This concentration is designed for those students who seek to gain practical knowledge in starting, managing, or running a business. The concentration is aimed at providing students with the specialized knowledge of entrepreneurship, e-business, small business management, and family business. Entrepreneurship is one of the core concentrations in many schools of business. Completing this concentration will enable students to compete in the marketplace for employment or to start new business ventures.

According to the U.S. Department of Commerce, California is a leader in small business and family business. This concentration will enable students to gain knowledge on various aspects of small business and family business including venture capital, risk management, registration of new business, security issues, bankruptcy, estate planning, and philanthropy. This knowledge, combined with knowledge gained in the BBA program will significantly enhance the earning potential of a student. Students are strongly advised to contact the above-named Faculty Advisor for guidance and recommendations regarding academic preparation for this minor.

#### **Program Outcomes**

Upon successful completion of this program, students will be able to:

- Identify the origin and development of entrepreneurship
- Analyze risk taking and innovation
- · Describe marketing of goods and services
- Comprehend financial plan and control of small business
- Apply the basics of e-commerce through technology
- Analyze E-Commerce servers and clients
- Distinguish family business from other forms of business
- Examine the impact of family business both nationally and globally

#### **Requirements for the Concentration**

(4 courses; 18 quarter units)

Students must successfully complete the following four courses:

| MGT 481 | Foundations of Entrepreneurship |
|---------|---------------------------------|
| MGT 482 | Small Business Management       |
| MGT 483 | E-Business                      |
| MGT 484 | Family Business Management      |

## ▲ Concentration in Finance <sup>(†)</sup>

#### (467)

Faculty Advisor: Gurdeep Chawla • (408) 236-1138 • gchawla@nu.edu

Career opportunities in finance are in three interrelated areas: financial institutions, including banks, insurance companies, credit unions and similar organizations; investments, including the sale of securities or security analysis; and financial management in all types of commercial and not-for-profit organizations. This concentration prepares students for future managerial responsibilities in these areas with an emphasis on the financial management of organizations.

Students must successfully complete the following courses for a concentration in finance. Students must complete at least four of the courses in residence at National University. It is recommended that students take these courses toward the end of their program after completing the upper-division BBA core courses.

#### **Requirements for the Concentration**

(6 courses; 27 quarter units)

| FIN 440 | Financial Institutions               |
|---------|--------------------------------------|
|         | (Prerequisite: FIN 310)              |
| FIN 442 | Investments                          |
|         | (Prerequisites: FIN 310 and FIN 440) |
| FIN 443 | Working Capital Management           |
|         | (Prerequisite: FIN 310)              |
| FIN 444 | Risk Management and Insurance        |
|         | (Prerequisite: FIN 310)              |
| FIN 446 | International Financial Management   |
|         | (Prerequisite: FIN 310)              |
| FIN 447 | Financial Planning                   |
|         | (Prerequisites: FIN 310 and FIN 442) |

## Concentration in Hospitality and Casino Management

(479)

Faculty Advisor: Michael Pickett • (858) 642-8374 • mpickett@nu.edu

This concentration is designed for those majoring in business administration who seek entry or advancement in the management of hospitality and casino industries. There is a wide and growing range of opportunities for graduates including management, marketing, and community relations in hotels, restaurants, tourism facilities, and visitor's bureaus.

#### **Requirements for the Concentration**

(7 courses; 31.5 quarter units)

SMG 432 Principles of Leisure Services Management
HCM 400 Principles of Hospitality and Casino Accounting
HCM 430 Principles of Hospitality and Casino Staffing
HCM 450 Native American Tribal Community Development
HCM 440 Cultural Diversity and Hospitality Management
HCM 420 Hospitality and Casino Marketing
HCM 410 Hospitality and Gaming Law

## ▲ Concentration in Human Resource Management ℃

(468)

Faculty Advisor: Bernadette Baum  $\bullet$  (858) 642-8404  $\bullet$  bbaum@nu.edu

This concentration provides education, knowledge and skills that apply to every level of an organization. This degree program is excellent preparation for students attracted to a career in the increasingly important field of human resource management.

#### **Requirements for the Concentration**

(6 courses; 27 quarter units)

Students must successfully complete the following courses for a concentration in human resource management. Students must complete at least four of the courses in residence at National University. It is recommended that students take these courses in the order listed below toward the end of their program after completing the upper-division BBA core courses.

| HRM 409B | Survey in Human Resources Management and              |
|----------|---|
|          | Organization Development                              |
| HRM 432  | Recruiting, Selection, Promotion, and Retention       |
| HRM 433  | Pay and Benefit Administration, and HR Technology     |
| HRM 439  | Legal, Regulatory, and Labor Relation Concerns in HRM |
| ODV 410  | Organizational Development, Career Systems, and       |
|          | Training and Development                              |
| ODV 420  | Introduction to Organizational Pahavian               |

ODV 420 Introduction to Organizational Behavior

# ▲ Concentration in Marketing ~ 🖰

(469)

Faculty Advisor: Ramon Corona • (858) 642-8427 • rcorona@nu.edu

This concentration is organized around a managerial framework that gives students an understanding of the concepts of marketing as well as the application of these concepts in making decisions and managing marketing activities. There is a wide range of opportunities in marketing, including marketing management, marketing research, purchasing manager/buyer, market analysis, product/branch manager, retailing, sales promotion, and international marketing.

Students must successfully complete the following courses for a

concentration in marketing, with at least four of them in residence at National University. It is recommended that students take these courses toward the end of their program after completing the upperdivision BBA core courses.

#### **Requirements for the Concentration**

(6 courses; 27 quarter units)

| MKT 420     | Principles of Consumer Behavior    |
|-------------|------------------------------------|
|             | (Prerequisite: MKT 402A)           |
| MKT 430     | Introduction to Global Marketing   |
| WIK1 450    | 0                                  |
|             | (Prerequisite: MKT 402A)           |
| MKT 434     | Introduction to Market Research    |
|             | (Prerequisite: MKT 402A)           |
| MKT 443     | Introduction to Advertising        |
|             | (Prerequisite: MKT 402A)           |
|             |                                    |
| Plus any tu | o of the following courses:        |
|             | Sales Techniques and Methodology   |
|             | (Prerequisite: MKT 402A)           |
| MKT 441     | Channel and Value Networks         |
|             | (Prerequisite: MKT 402A)           |
| MKT 442 A   | Introduction to Public Relations   |
| WIICI 112/1 | (Prerequisite: MKT 402A)           |
| MKT 445     |                                    |
| MIK1 445    | e-Marketing                        |
|             | (Prerequisite: MKT 402A)           |
| MKT 446     | Introduction to Services Marketing |
|             | (Prerequisite: MKT 402A)           |
| MKT 447     | Marketing for Entrepreneurs        |
|             | (Prerequisite: MKT 402A)           |
|             |                                    |

### ▲ Concentration in Sports Management 🕀

#### (259)

Faculty Advisor: George Drops • (858) 642-8438 • gdrops@nu.edu

This concentration is designed for those students majoring in business administration who may seek entry into management and marketing in the specialized fields of the sports and fitness industries. There is a wide range of opportunities in sports management including professional sports, university and college athletic programs, high school athletics, fitness centers, golf and tennis clubs, sports instruction centers, leisure and recreational facilities and allied businesses.

#### **Requirements for the Concentration**

(6 courses; 27 quarter units)

| SMG 430 | Introduction to Sports Management         |
|---------|---|
| SMG 432 | Principles of Leisure Services Management |
| SMG 433 | Sports Financial Management               |
| SMG 434 | Principles and Problems of Coaching       |
| SMG 435 | Legal Aspects of Sports Administration    |
| SMG 436 | Sports Marketing and Promotions           |

# BACHELOR OF SCIENCE

(620)

#### **General Education Program Requirements**

The general education program consists of a minimum of 70.5 quarter units. Of the 70.5 units, students must complete at least 4.5 units at the upper-division level and 4.5 units in diversity enriched coursework. A plus [+] indicates a diversity enriched offering. All undergraduate students working toward any associate or bachelor's degree must meet the University diversity requirement.

National University has general education requirements in the following eight areas:

#### AREA A: ENGLISH COMMUNICATION

(Minimum 15 quarter units)

#### AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

#### AREA C: INFORMATION LITERACY

(Minimum 4.5 quarter units)

#### AREA D: ARTS AND HUMANITIES

(Minimum 13.5 quarter units)

#### AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(Minimum 13.5 quarter units)

#### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(Minimum 6 quarter units required [Note: one science lab is required])

#### AREA G: MODERN LANGUAGE

(Minimum 9 quarter units)

See General Education section of the catalog for applicable courses. Students enrolled in a degree program under the School of Business and Management can elect to take general education electives to fulfill this requirement.

#### AREA A-G: GENERAL EDUCATION

(Minimum 4.5 quarter units)

Courses taken to achieve minimum levels of collegiate-level competency in the areas of writing and mathematical concepts and systems do not satisfy any portion of the general education requirement.

# ◆ Major in Accountancy <sup>^</sup>

(620-411)

#### Faculty Advisor: Connie Fajardo • (916) 855-4137 • cfajardo@nu.edu

This program is designed for students who wish to prepare for entry into the accounting profession and who plan to take the examinations leading to the attainment of professional designations such as Certified Public Accountant (CPA), Certified Management Accountant (CMA), and Certified in Financial Management (CFM). All three designations require a baccalaureate degree.

Students considering the CPA designation will be eligible to sit for the CPA Exam in California upon earning this baccalaureate degree, and should then consider enrolling in a masters program such as the MBA or MS in Corporate and International Finance in order to meet the 150 semester units of higher education required by California and most other states. (See also BS/MBA transition program, below.)

# Bachelor of Science in Accountancy (BSA)/Master of Business Administration (MBA) Transition Program

Students who are currently enrolled in the Bachelor of Science in Accountancy program, have at least a cumulative GPA of 3.0, and are within six courses of graduation may register for the BSA/MBA transition program.

Students in the BSA transition program may take up to three MBA classes as electives during the BSA. Students can select any three graduate-level accounting courses for which required course prerequisites (if any) have been met, or may select from the following MBA core courses: BKM 600, ELB 620, MKT 602, and LED 601.

Students must complete graduate-level coursework taken as part of the BSA degree with a grade of B or better. This coursework, which counts as electives In the BSA, will not transfer as graduate-level credit to National University or any other institution as it is part of an undergraduate degree program. Grades earned in graduate level courses will be calculated as part of the student's undergraduate grade point average. Students must apply for and begin the MBA program within six months after completing their final BBA course.

The number of courses required to earn an MBA degree for transition program students is reduced from 14 to as few as 11 courses, depending on classes selected and grades earned. Students must complete their MBA program within four years with no break exceeding 12 months.

#### **Program Outcomes**

Upon successful completion of this program, students will be able to:

- 1. Comprehend and apply the conceptual framework underlying the principles of accounting.
- Measure and properly report information related to accounting for the assets, liabilities, equities, revenues and expenses of business and not-for-profit entities, and of the entity's cash flows.
- 3. Apply the basic concepts underlying taxation of individuals and business enterprises.
- 4. Prepare financial statements for external use and managerial accounting reports for internal decision-making.
- 5. Demonstrate written communication skills at the level required for accounting professionals.

#### **Online Course Availability**

All of the coursework in this program can be taken online. Most online courses offer one or two live voice/visual evening sessions per week, in which instructors orally explain important concepts, visually illustrate problem-solving techniques, and respond to student questions. These sessions are recorded so that students who are unable to attend at the scheduled time can play back the video recording at a convenient time.

#### **Degree Requirements**

To receive a Bachelor of Science with a major in accountancy, students must complete at least 180 quarter units as described below, 76.5 of which must be completed at the upper-division level and 45 of which must be completed in residence at National University. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Refer to the section of undergraduate admission requirements for specific information regarding admission and evaluation.

#### Preparation for the Major

(4 courses, 18 quarter units)

| MNS 205 | Introduction to Quantitative Methods for Business * |
|---------|---|
|         | (Prerequisite: Placement Evaluation)                |
| ECO 203 | Principals of Microeconomics*                       |
| ECO 204 | Principles of Macroeconomics*                       |
| ACC 201 | Financial Accounting Fundamentals**                 |
|         | _   |

\* May be used to satisfy general education Requirements \*\* Eligible for Credit-By-Exam waiver: contact Faculty Advisor

#### **Requirements for the Major**

(17 courses, 76.5 quarter units)

To receive a Bachelor of Science with a major in accountancy, students must successfully complete the courses listed below.

Students can request waivers of any of the courses if they have completed an upper-division undergraduate or graduate course of similar content at a regionally-accredited college or university with a grade of "C" or better. Students must take at least six of the courses in the major in residence at National University.

#### **Core Business Requirements**

(5 courses, 22.5 quarter units)

| BKM 400  | Business Knowledge Management Strategies (New      |
|----------|--|
|          | course replaces CIS 301)                           |
| LAW 304  | Legal Aspects of Business I                        |
| MGT 409C | Principles of Management and Organization          |
| FIN 310  | Business Finance                                   |
|          | (Prerequisite: ACC 201)                            |
| and      |  |
| MGT 430  | Survey of Global Business                          |
|          | (Prerequisites: ECO 203 and ECO 204)               |
| or       |  |
| MKT 402A | Marketing Fundamentals                             |
| or       |  |
| MNS 407  | Management Science                                 |
|          | (Prerequisite: MNS 205)                            |
|          | (Recommended for students considering the CPA, CMA |
|          | or CFM designation)                                |
|          | 5  |

#### Prerequisite for all Accounting Courses

Students must have completed ACC 201 or its equivalent with a minimum grade of "C" within two years of taking any of the following accounting courses, unless a grade of 75 or better is received on an appropriate challenge exam.

#### Accounting Core Requirements

(12 courses, 54 quarter units)

To be adequately prepared for the accounting courses listed below, students should take ACC 410A first since it starts with a review of the fundamentals upon which much of the subsequent material is based. Students who wish to start at a later point in the program are advised to test their retention of accounting fundamentals by working the end-of-chapter exercises in the first five chapters of an Intermediate Accounting text.

| ACC 300   | Applied Technology for Accountants** |
|---|--------------------------------------|
|   | (Prerequisite: ACC 201)              |
| ACC 410A  | Intermediate Accounting I            |
|   | (Prerequisite: ACC 201)              |
| ACC 410B  | Intermediate Accounting II           |
|   | (Prerequisite: ACC 201)              |
| ACC 410C  | Intermediate Accounting III          |
|   | (Prerequisite: ACC 201)              |
| ACC 431   | Advanced Accounting                  |
|   | (Prerequisite: ACC 201)              |
| ACC 432A  | Taxation - Individual                |
|   | (Prerequisite: ACC 201)              |
| ACC 432B  |                                      |
|   | (Prerequisite: ACC 432A)             |
| ACC 433A  | Managerial Accounting I              |
|   | (Prerequisite: ACC 201)              |
| ACC 433B  |                                      |
|   | (Prerequisite: ACC 433A)             |
| ACC 434   | Government and Nonprofit Accounting  |
|   | (Prerequisite: ACC 201)              |
| ACC 435A  | Auditing I                           |
|   | (Prerequisite: ACC 201)              |
| ACC 435B  | Auditing II                          |
|   | (Prerequisite: ACC 435A              |
| **Eligible for Credit-By-Exam waiver: contact Faculty Advisor |                                      |

## Major in Financial Management

#### (620-409)

Faculty Advisor: Gurdeep Chawla • (408) 236-1138 • gchawla@nu.edu

The objective of the major in Financial Management is to prepare students for positions in the field of corporate financial management. The program helps prepare students for the Certified in Financial Management (CFM) exam which is the principal certification for corporate financial officers. It also prepares students for the Certified Cash Manager (CCM) exam. The CCM designation signifies a high degree of expertise in the field of cash and treasury management.

#### **Program Outcomes**

Upon successful completion of this program, students will be able to:

- Develop essential skills in problem-solving with emphasis on wealth maximization
- Integrate ethical and global issues that impact business and finance.
- Gain a greater understanding of political, social, legal, regulatory, and technological issues in the context of micro and macro finance.
- Equip themselves with an integrated view of the theoretical and practical aspects of Finance.
- Prepare themselves for careers in financial management, financial institutions, financial markets, law, government service, and related fields.

#### **Degree Requirements**

To receive a Bachelor of Science with a major in financial management, students must complete at least 180 quarter units as articulated below, 76.5 of which must be completed at the upperdivision level and 45 of which must be completed in residence at National University. The following are specific degree requirements. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Refer to the section of undergraduate admission procedures for specific information regarding admission and evaluation.

#### Prerequisites for the Major

(5 courses; 22.5 quarter units)

| MNS 205  | Introduction to Quantitative Methods for Business * |  |
|--|---|--|
|  | (Prerequisite: Placement evaluation)                |  |
| ECO 203  | Principles of Microeconomics *                      |  |
| ECO 204  | Principles of Macroeconomics *                      |  |
| ACC 201  | Financial Accounting Fundamentals                   |  |
| ACC 202  | Managerial Accounting Fundamentals                  |  |
|  | (Prerequisite: ACC 201)                             |  |
| * May be used to satisfy general education requirements. |   |  |
|  |   |  |
| Requirements for the Major                               |   |  |
| (17 courses; 76.5 quarter units)                         |   |  |
| -  |   |  |
| Core Business Requirements                               |   |  |

(7 courses; 31.5 quarter units)

| BKM 400  | Business Knowledge Management Strategies  |
|----------|---|
| MNS 407  | Management Science                        |
|          | (Prerequisite: MNS 205)                   |
| MGT 409C | Principles of Management and Organization |
| FIN 310  | Business Finance                          |
|          | (Prerequisite: ACC 201)                   |
| MKT 402A | Marketing Fundamentals                    |
| LAW 304  | Legal Aspects of Business I               |
| ACC 300  | Applied Technology for Accountants        |
|          | (Prerequisite: ACC 201)                   |

#### **Core Finance Courses**

(10 courses; 45 quarter units)

| FIN 440 | Financial Institutions                                      |
|---------|---|
|         | (Prerequisite: FIN 310)                                     |
| FIN 442 | Investments   |
|         | (Prerequisites: FIN 310 and FIN 440)                        |
| FIN 443 | Working Capital Management                                  |
|         | (Prerequisite: FIN 310)                                     |
| FIN 444 | Risk Management and Insurance                               |
|         | (Prerequisite: FIN 310)                                     |
| FIN 446 | International Financial Management                          |
|         | (Prerequisite: FIN 310)                                     |
| FIN 447 | Financial Planning  |
|         | (Prerequisites: FIN 310 and FIN 442)                        |
| FIN 449 | Analysis of Financial Statements                            |
|         | (Prerequisite: FIN 310)                                     |
| FIN 450 | Bank Management   |
|         | (Prerequisite: FIN 310)                                     |
| FIN 451 | Real Estate Finance   |
|         | (Prerequisite: FIN 310)                                     |
| FIN 448 | Seminar in Finance  |
|         | (Prerequisites: FIN 310, FIN 440, FIN 442, FIN 443, and FIN |
|         | 446)  |
|         |   |

# Major in Organizational Leadership

(620-435)

Faculty Advisor: Julia Buchanan • (858) 642-8453 • jbuchanan@nu.edu

The Bachelor of Science in Organizational Leadership (BSOL) is designed to give students the opportunity to develop skills needed to be an effective leader in team and group settings within organizations. It is intended to help students move from an authoritarian paradigm to one of collaboration and integration.

The BSOL degree is intended to provide students who are interested in starting or who are currently working in business enterprises to develop theoretical and applied knowledge of leadership theories and frameworks. Building understanding of the difference between leading small organizations and more traditional large corporations and agencies will be examined. The premise that leadership is a process and can be learned through understanding theory, analyzing scenarios, case studies, and complex problems will provide the opportunity for students to acquire their learning experientially.

#### **Program Outcomes**

Upon successful completion of this program, students will be able to:

- Develop a personal leadership approach
- Compare and contrast the concepts of leadership and powerIdentify challenges and advantages of diverse groups in
- organizations
- Analyze negotiating styles of leaders and evaluate their effectiveness
- Analyze the strategies leaders use to motivate and evaluate members of groups and teams
- Analyze and evaluate aspects of leadership in organizational culture
- Evaluate the ethical implications of leadership decisions and strategies
- Compare and analyze strategies and frameworks used by leaders to initiate change in organizations
- Compare and explain classic studies that inform the understanding and application of leadership and organizational theory
- Apply appropriate technology to leadership decision making in organizations
- Communicate orally and in writing using proper business communication formats.

#### **Degree Requirements**

To receive a Bachelor of Science in Organizational Leadership, students must complete at least 180 quarter units as articulated below, 76.5 of which must be completed at the upper-division level and 45 of which must be completed in residence at National University. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Refer to the section on undergraduate admission procedures for specific information regarding application and evaluation. Students must maintain a C average.

#### **Requirements for the Major**

(14 courses; 63 quarter units)

#### **Non-Leadership Core Requirements**

(4 courses; 18 quarter units)

| MGT 409C | Principles of Management and Organization |
|----------|---|
| MKT 442A | Introduction to Public Relations          |
|          | (Prerequisite: MKT 402A)                  |
| HRM 409B | Survey in Human Resources Management and  |
|          | Organization Development                  |
| LAW 400  | Current Legal Issues                      |
|          | -   |

#### Leadership Core Requirements

(10 courses; 45 quarter units)

| LED 400 | Introduction to Leadership                      |
|---------|---|
| LED 410 | Leading in Diverse Groups and Teams             |
| LED 420 | Adaptive Leadership in Change                   |
| LED 430 | Conflict and Negotiation for Leaders            |
| LED 440 | Leadership Overview of Organizational Functions |
| LED 450 | Advanced Group Dynamic Theory                   |
|         | (Prerequisites: LED 400 and LED 410)            |
| LED 460 | Ethics and Decision Making in Leadership        |
| LED 470 | Classic Studies of Leadership                   |
| LED 480 | Research for Leaders                            |
|         | (Prerequisites: LED 410 and LED 420)            |
| LED 490 | Leadership Capstone Project                     |
|         | (Prerequisites: completion of 6 LED courses)    |
|         |   |

#### **Upper-Division Electives**

(2 courses; 9 quarter units)

Students select from upper-division courses with the following prefixes: ECD, ECO, FIN, HCM, HRM, MGT, ODV, SMG, and SOC.

# School of Business and Management Minors

### ● Minor in Accountancy ∕ <sup>↑</sup>

(450)

Faculty Advisor: Connie Fajardo • (916) 855-4137 • cfajardo@nu.edu

#### **Requirements for the Minor**

(6 courses; 27 quarter units)

Students can earn a minor in accountancy if they have successfully completed ACC 410A and at least five of the upper-division accounting courses required in the major. See "Major in Accountancy." Prerequisites may be required depending on courses chosen.

# Minor in Business Administration

(463) Faculty Advisor: Ramon Corona • (858) 642-8427 • rcorona@nu.edu

#### **Requirements for the Minor**

(11 courses; 49.5 quarter units)

#### Prerequisites for the Minor

(5 courses; 22.5 quarter units)

| ACC 201     | Financial Accounting Fundamentals                  |
|-------------|--|
| ACC 202     | Managerial Accounting Fundamentals                 |
|             | (Prerequisite: ACC 201)                            |
| ECO 203     | Principles of Microeconomics*                      |
| ECO 204     | Principles of Macroeconomics*                      |
| MNS 205     | Introduction to Quantitative Methods for Business' |
|             | (Prerequisite: Placement Evaluation)               |
| *May be use | ed to satisfy general education requirements.      |
|             |  |

#### **Core Requirements**

(6 courses; 27 quarter units)

| FIN 310  | Business Finance                         |
|----------|--|
|          | (Prerequisite: ACC 201)                  |
| MGT 409C | Principles of Management                 |
| MNS 407  | Management Science                       |
|          | (Prerequisite: MNS 205)                  |
| HRM 409B | Survey in Human Resources Management and |
|          | Organization Development                 |
| MKT 402A | Marketing Fundamentals                   |
| MGT 430  | Survey of Global Business                |
|          | (Prerequisites ECO 203 and ECO 204)      |

## Minor in Business Studies

(451)

Faculty Advisor: Ramon Corona • (858) 642-8427 • rcorona@nu.edu

#### **Requirements for the Minor**

(11 courses; 49.5 quarter units)

#### Prerequisites for the Minor

(5 courses; 22.5 quarter units)

| ACC 201 | Financial Accounting Fundamentals                  |
|---------|--|
| ACC 202 | Managerial Accounting Fundamentals                 |
|         | (Prerequisite: ACC 201)                            |
| ECO 203 | Principles of Microeconomics*                      |
| ECO 204 | Principles of Macroeconomics*                      |
| MNS 205 | Introduction to Quantitative Methods for Business* |
|         | (Prerequisite: Placement Evaluation)               |
|         |  |

#### **Core Requirements**

(6 courses; 27 quarter units)

| MGT 409C | Principles of Management and Organization |
|----------|---|
| FIN 310  | Business Finance                          |
|          | (Prerequisite: ACC 201)                   |
| LAW 410  | Introduction to Law and Legal Analysis    |
| MGT 430  | Survey of Global Business                 |
|          | (Prerequisites: ECO 203 and ECO 204)      |
| MKT 402A | Marketing Fundamentals                    |
| MNS 407  | Management Science                        |
|          | (Prerequisite: MNS 205)                   |

### • Minor in Economics 🖑

(481)

Faculty Advisor: Brian P. Simpson • (858) 642-8431 • bsimpson@nu.edu

# Requirements for the Minor

(8 courses; 36 quarter units)

This minor is designed for those students who seek to gain

specialized knowledge in the field of economics. It emphasizes market process (or free market) economics. Economics prepares students for careers in business, government, and nonprofit organizations. Economics also provides very good preparation for graduate level work, including in business, law, public policy, and public administration.

Knowledge of economics can increase one's earning potential relative to other academic fields (including business and management). According to a U.S. Department of Commerce report, those with undergraduate economic degrees are among the highest paid workers. They place third out of fifteen academic fields (behind only engineering and agriculture/forestry). By choosing a minor in economics, students can take advantage of some of the increased earnings potential that economics makes possible. Students must successfully complete the following courses for a minor in economics.

#### Prerequisites for the Minor

(2 courses; 9 quarter units)

ECO 203 Principles of Microeconomics\*
ECO 204 Principles of Macroeconomics\*
\* May be used to satisfy general education requirements.
Note: ECO 203 and ECO 204 are not prerequisites for all courses in the minor.

#### **Requirements for the Minor**

(6 courses; 27 quarter units)

| ECO 401<br>ECO 402 | Market Process Economics I<br>Market Process Economics II |
|--------------------|---|
| ECO 447            | Money and Banking   |
|                    | (Prerequisites: ECO 203 and 204)                          |
| ECO 415            | Labor Economics   |
|                    | (Prerequisites: ECO 203 and 204)                          |
| ECO 420            | International Economics                                   |
|                    | (Prerequisites: ECO 203 and 204)                          |
| ECO 430            | Economics and Philosophy                                  |
|                    |   |

# **Graduate Degrees**

# ■ EXECUTIVE MASTER IN BUSINESS ADMINISTRATION ~<sup>⊕</sup>

#### (737)

Faculty Advisor: Bruce Buchowicz • (858) 642-8439 • bbuchowicz@nu.edu

The mission of the Executive Master in Business Administration (EMBA program) is to provide current and potential executives with the knowledge and skills needed for effective management and decision-making in a competitive, global, economy.

The EMBA program is designed to provide students with a balance of theoretical concepts and practical approaches to business problems, along with analytical skills, critical thinking, communication, and interpersonal skills. Emphasis is placed on developing the leadership and team-building abilities needed to manage change and make sound decisions within the framework of a strategic plan. The EMBA program is characterized by students progressing through the program in a cohort group, by team-based learning, faculty-student interaction, and current and relevant curriculum. Student learning is enhanced by sharing the management experience of classmates who have achieved mid-level to senior-level management positions in business.

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#### **Program Outcomes**

Upon successful completion of the program, students will be able to:

- Evaluation of new strategies, evaluation of entry and exit strategies.
- Evaluation of acquisition, joint ventures, and growth.
- Describe the ethical and legal responsibilities in organizations and society.
- Evaluate organizational structure and culture as supportive of organization direction and strategy.
- Specify the human resource issues associated with the production of a product or service.
- Explain the use of accounting and financial resources to achieve the firm objectives.
- Utilize current methodologies, systems, and technologies to plan, execute, implement, and analyze performance of the organization and its resources.
- Develop the skills necessary to become an effective manager.
- Utilize statistical data analysis and management science as they support decision-making processes throughout an organization.
- Utilize economic tools and theory to attain the optimal business decisions.

#### Admission to the Program

Applicants must have a minimum of five years of work experience, including three years of supervisory experience with an upward progression in responsibilities. They must have achieved a mid-level or senior-level management position with significant decisionmaking responsibility. Such positions include, but are not limited to: supervision of other employees, responsibility for budgets or financial performance, and project management or similar responsibilities.

#### **Core Requirements**

(12 courses; 54 quarter units)

#### Module I – Analytical Tools

- MGT 605 Organizational Management and Leadership
- MKT 602 Marketing Management
- BKM 600 Knowledge Management for Business Strategies
- MNS 682 Data Analysis for Decision Making
- ECO 635 Economics for Executive Managers
- FIN 670 Finance and Accounting for Executives
- LAW 605 Legal Issues in Business
- MGT 640 Operation Planning and Implementation

#### Module II – Integrating Experience

(At least six Module I courses must be successfully completed before a student can enroll in any Module II courses.)

| EMB 651 | Case Studies in Business Decision-Making |
|---------|--|
| EMB 652 | Business Games (Simulations)             |
| IBU 653 | Global Business & Strategic Planning     |
| EMB 696 | EMBA Project                             |
|         |  |

# ■ EXECUTIVE MASTER IN BUSINESS ADMINISTRATION (SPANISH VERSION) ~ <sup>®</sup>

#### (738)

Faculty Advisor: Ramon Corona • (858) 642-8427 • rcorona@nu.edu

Offered online and conducted entirely in the Spanish language, the Spanish EMBA program provides nontraditional learners with the theories and the skills needed for executive decision-making and negotiation. The focus of this program is on multidisciplinary approaches, including economic, political, and cultural analyses in the strategic planning and development of national and international business. Moreover, the ethical application for executives in organizations is emphasized.

### Spanish EMBA Core Requirements

(12 courses; 54 quarter units)

| EMB 689S | Liderazgo y Negociaciones (Leadership and<br>Negotiations)                            |
|----------|---|
| MKT 631S | Mercadotecnia Global (Global Marketing)   |
| ELB 620S | Principios de Negocios Electrónicos (Principles of Electronic Business)               |
| MNS 601S | Estadística para Negocios (Statistics for Business)                                   |
| EMB 674S | Estrategias Competitivas Globales (Global Competitive Strategies)                     |
| EMB 682S | Contabilidad Gerencial (Managerial Accounting)  |
| EMB 673S | Alianzas Estratégicas Internacionales (International<br>Strategic Alliances).         |
| EMB 683S | Estrategias Económicas Internacionales (International<br>Economic Strategies)         |
| EMB 672S | Administración del Riesgo Internacional (International<br>Risk Management)            |
| EMB 671S | Simulación de Negocios Globales (Global Business<br>Simulation)                       |
| MGT 602S | La Toma de Decisiones Estratégica en Negocios Globales<br>(Strategic Decision Making) |
| EMB 696S | Proyecto EMBA (EMBA Project)  |

# MASTER OF ARTS IN HUMAN RESOURCE MANAGEMENT

#### (710-817)

Faculty Advisor: Bernadette Baum • (858) 642-8404 • bbaum@nu.edu

The Master of Arts in Human Resource Management provides students with both the critical skills and knowledge required to be effective in this continuously growing domain through case study, experiential learning opportunities, and best practices. This program serves to increase skills and abilities for a professional to either serve as a senior management team member or as a consultant to organization leadership on human resource management and organizational change issues.

The program integrates the many facets of human resource management in the 21st century through concept, theory, critical analysis and application of recruitment, staffing, training and development, organizational behavior, performance improvement, compensation, benefits, insurance, technology, legal aspects, labor relations, work groups and teams, organizational change and adaptation, ethical issues, and safety concerns in the workplace. The curriculum, incorporating relevant HRM and ODV technology and best practices for both consultants and internal practitioners, is much more in-depth and geared toward those already in the field of practice (HRM and ODV) and for business professionals who want to extend their knowledge beyond operations management. This cutting edge program is designed to offer an innovative multidisciplinary approach to the growing field of human resource management and the continuum of organizational change in the 21st century.

#### Tracks

It is highly recommended that students complete the core courses prior to moving into the areas of specialization tracks. This will help ensure the students have a solid foundation in human resource management. Operating outside of this recommendation is at the student's own discretion and he or she should seek advisement from a counselor and/or lead faculty of the program.

#### **Program Outcomes**

Upon completion of this program candidates will be able to:

- Complete a job analysis of a specific job to be used for recruiting, selection, performance appraisal, training, and compensation.
- Develop a recruiting plan and design a selection process for recruiting, interviewing, and selecting candidates for employment for jobs within an organization.
- Conduct a needs assessment and design a training program for current employees on a specific topic related to organizational goals.
- Assess benefits relevant to the employee population and organizational structure, and formulate a compensation system based upon merit, knowledge, and skill acquisition.
- Assess and develop methods designed to prevent employer liability and labor relation issues (anti-discrimination statutes, employee and labor relations, union, and non-union environment issues).
- Develop a consulting proposal and course of action for an organization regarding a particular organizational challenge and/or change process.
- Recognize, analyze, and effectively address ethical, legal, and safety challenges faced in the workplace.

#### **Degree Requirements**

(12 courses; 54 quarter units)

To receive a Master of Arts in Human Resource Management, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work competed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. It is recommended that students take the project course as their last course in the sequence of the program.

#### **Core Requirements**

(9 courses; 40.5 quarter units)

| HRM 660   | Theory and Practice of Human Resource Management                        |
|-----------|---|
| HRM 630   | Legal, Ethical and Safety Issues in Human Resource                      |
|           | Management  |
| HRM 637   | Workforce Planning, Development, and Outsourcing                        |
| HRM 633A  | Seminar in Employee Relations, Labor Relations, and                     |
|           | Union Management  |
| HRM 667   | Compensation and Benefits   |
| HRM 669   | Research Seminar in Human Resource Management                           |
|           | Corporate Strategy  |
| ODV 600   | Theory and Practice of Organizational Development                       |
| ODV 601   | Integrating Performance Management, Technology &                        |
|           | Organizational Communication  |
| HRM 670   | Project/Thesis  |
|           | ( <i>Prerequisite: Completion of six of the required core courses</i> ) |
| or        |   |
| MGT 610C* | Graduate Business Project   |

MGT 610C\* Graduate Business Project

(Prerequisite: completion of 27 quarter units of Core Requirements)

#### **Program Electives**

(3 courses; 13.5 quarter units)

To complete their program, students must select electives from any graduate level course offered by the School of Business and Management. Highly recommended in the choice of electives are FIN 600, Finance for Non-Financial Managers, and MGT 635, The Organizational Consulting Process.

In the alternative, students may complete their program by completing the specializations listed below. Completion of specialization in lieu of electives will increase the total number of courses by one.

# ▲ Specialization in Organizational Development and Change Management (1990)

#### **Program Requirements**

(4 courses; 18 quarter units)

| 0.00 × 0.00 |  |
|-------------|--|
| ODV 606     | Seminar in Training and Development                  |
| ODV 608     | Research Seminar in Current Issues/trends in Applied |
|             | Organizational Development                           |
| LED 602     | Developing and Implementing Groups and Teams         |
| ODV 610     | Advanced Studies in Organizational Behavior in a     |
|             | Diverse Society                                      |
|             |  |

# ▲ Specialization in Organizational Leadership <sup>√</sup>

#### (888)

Faculty Advisor: Julia Buchanan • (858) 642-8453 • jbuchanan@nu.edu

The purpose of the area of specialization in organizational leadership is to provide students with the skills and theoretical concepts that will assist them when seeking promotions or positions in management and supervision. This area of specialization is designed to prepare diverse learners to become effective, change-oriented leaders in an international society by adding distinctive and challenging curricula.

This area of specialization is ideal for those who desire to understand the technical and reflective processes that often accompany opportunities to exercise leadership in profit and not-for-profit organizations.

#### **Program Requirements**

(4 courses; 18 quarter units)

- LED 603 Organizational Leadership
- LED 604 Change and Adaptation within Organizations
- LED 605 Negotiation, Bargaining, Conflict Resolution

# ■ MASTER OF ARTS IN MANAGEMENT

#### (710-804)

Faculty Advisor: Richard Weaver • (858) 642-8490 • rweaver@nu.edu

The Master of Arts in Management gives students in professional and mid-management careers the opportunity to obtain decisionmaking skills through a sequence of core courses in basic management and business subjects.

This program is designed primarily for students who have undergraduate degrees in fields other than business, desire a flexible program, and are seeking graduate work in management.

#### **Program Outcomes**

Upon successful completion of this program, students will be able to:

- Demonstrate effectiveness in work situations requiring managerial skills
- Influence others to contribute productively
- · Distinguish ethical aspects of managerial decisions
- Utilize information gathering, storage, and distribution to improve decision making
- Discern the more effective marketing principles in both internal

and external situations

- Explain the relationship of problems to achievement of organizational objectives
- Identify and secure resources necessary to solve business problems
- Monitor and assess results of performance

## **MA Management Transition Program**

National University students who completed a transition program as part of their undergraduate degree and who satisfy MA transition program requirements described in the catalog description of the Bachelor of Arts in Management undergraduate program must complete a minimum of 45 quarter units for their MA in Management degree. The number of units required for the MA in Management program is dependent on the coursework completed in the Bachelors transition program and the grades earned.

## **Degree Requirements**

(12 courses; 54 quarter units)

To receive a Master of Arts in Management, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Refer to the section on graduate admission procedures for specific information regarding application and evaluation.

## **Core Requirements**

(12 courses; 54 quarter units)

| BKM 600  | Knowledge Management for Business Strategies            |
|----------|---|
| LED 601  | Theories, Practices and Ethics of Leadership            |
| MGT 601  | Principles of Management                                |
| MKT 602  | Marketing Management                                    |
| FIN 600  | Finance for Non-Financial Managers                      |
| ODV 600  | Theory and Practice of Organizational Development       |
| MGT 603  | Business Operations Management                          |
| MGT 604  | Business Project Management                             |
| MGT 606  | Service Management                                      |
| MGT 607  | Performance Management                                  |
| MGT 602  | Strategic Decision-Making in Global Business            |
|          | (Prerequisite: completion of 22.5 quarter units of core |
|          | requirements)   |
| MGT 610C | Graduate Business Project                               |
|          | (Prerequisite: Completion of 27 quarter units of core   |
|          | requirements)   |

## MA in Management Area of Specialization ▲ Specialization in Organizational Leadership<sup>®</sup>

## (888)

Faculty Advisor: Julia Buchanan • (858) 642-8453 • jbuchanan@nu.edu

The purpose of the area of specialization in organizational leadership is to provide students with the skills and theoretical concepts that will assist them when seeking promotions or positions in management and supervision. This area of specialization is designed to prepare diverse learners to become effective, change-oriented leaders in an international society by adding distinctive and challenging curricula.

This area of specialization is ideal for those who desire to understand the technical and reflective processes that often accompany opportunities to exercise leadership in profit and not-for-profit organizations.

## **Program Requirements**

(4 courses; 18 quarter units)

| LED 602 | Developing and Implementing Groups and Teams |
|---------|--|
| LED 603 | Organizational Leadership                    |
| LED 604 | Change and Adaptation within Organizations   |
| LED 605 | Negotiation, Bargaining, Conflict Resolution |
|         |  |

## ■ MASTER OF BUSINESS ADMINISTRATION ℃

#### (730)

Faculty Advisor: Bruce Buchowicz • (858) 642-8439 • bbuchowicz@nu.edu

The mission of the Master of Business Administration (MBA) program is to prepare students for leadership positions in business, and to provide them with the knowledge and skills needed to successfully manage organizations in an ever-changing business environment. The MBA program imparts the conceptual understanding and application of problem-solving tools contained in basic business disciplines, including accounting, economics, data analysis, finance, management, leadership, and marketing. In addition, students are equipped with the skills needed for effective team-building, quantitative and qualitative decision-making, and creative problem-solving.

## **Program Outcomes**

Upon successful completion of the MBA program, students will be able to:

- Formulate the appropriate business policies and strategies within an environment of change to meet the interests of the organization's stakeholders.
- Synthesize the impact of ethical, leadership, economic, and technological changes in an organization.
- Evaluate the financial position of an enterprise, and plan the use of its financial resources to achieve its objectives.
- Apply the basic theories of leadership, knowledge management, economics, and business statistics to solving business problems and taking advantage of business opportunities.
- Synthesize information from functional areas within an organization, such as operations, finance, accounting, management, and marketing, as they support decision-making processes throughout an organization.

## Self-paced Foundation Courses (optional)

The following non-credit, self-paced, and self-study courses are offered online, free of charge to registered MBA students. Selfassessment tests are available for students to ascertain their level of competency.

- BUS 500A Intermediate Algebra Foundation (recommended for ECO 607)
- BUS 500C Macro and Microeconomics Foundation (recommended for ECO 607)

## **Two-Week Foundation Courses (required)**

The following two foundation courses are required for all MBA students, but may be waived if a score of 75 percent or above is achieved on a challenge exam. Rather than being self-study and self-paced, these courses are scheduled in normal fashion with qualified instructors. Each is two weeks long: ACC 501 is offered in the first two weeks of an academic month, and FIN 501 is offered in the second two weeks. The two courses are offered online and at certain onsite campus locations. Grading is "S" for Satisfactory, or "U" for Unsatisfactory. Although these courses do not provide academic

credit, they have substantial content that is not covered in the related core courses. They must be successfully completed in order to graduate from the MBA program.

ACC 501 Accounting Fundamentals FIN 501 Finance Fundamentals (*Prerequisite: ACC 501*)

## **MBA Transition Program**

National University students who completed a transition program as part of their undergraduate degree and who satisfy MBA transition program requirements described in the catalog description of various undergraduate programs must complete a minimum of 49.5 quarter units for their MBA degree. The number of units required for the MBA program is dependent on the coursework completed in the Bachelors transition program and the grades earned.

## **Degree Requirements**

(14 courses; 63 quarter units)

To receive an MBA degree, students must complete at least 63 quarter units of graduate credit. A total of 13.5 quarter units of graduate work completed at another regionally accredited institution may be applied to this degree, provided the units were not used in earning another advanced degree.

Refer to the section on graduate admission procedures for specific information regarding application and evaluation.

## **Core Requirements**

(10 courses; 45 quarter units)

| BKM 600   | Knowledge Management for Business Strategies                 |
|-----------|--|
| LED 601   | Theories, Practices, and Ethics of Leadership                |
| ELB 620   | Principles of Electronic Business                            |
| MKT 602   | Marketing Management   |
| MNS 601   | Statistics for Business                                      |
| ECO 607   | Economics for Managerial Decision-Making                     |
| ACC 604   | Managerial Accounting  |
|           | (Prerequisite: ACC 501)                                      |
| FIN 609A  | Financial Management   |
|           | (Prerequisite: FIN 501)                                      |
| MGT 602   | Strategic Decision-Making                                    |
|           | (Prerequisite : completion of 27 quarter units of MBA Core   |
|           | Requirements)  |
| MGT 610C* | Graduate Business Project                                    |
|           | (Prerequisite : completion of 31.5 quarter units of MBA Core |
|           | Requirements)  |

\* The Graduate Business Project course MGT 610C is conducted in the manner described below. MGT 610C is two months in length.

**The Graduate Business Project (MGT610C)** is a comprehensive project that integrates prior course material. Therefore, students should schedule MGT 610C toward the end of their degree program, and after completing their area of specialization, if any. The minimum requirements are the completion of at least 31.5 quarter units of core requirements in the MBA program. To complete the project satisfactorily, students apply extensive effort in research and writing over a period of two months. Due to the time and effort required for this project, it is recommended that students dedicate themselves to the completion of this project without distraction. For more information, refer to the Business Project Handbook in the School of Business and Management section of the university's website.

## **General Electives**

(4 courses; 18 quarter units)

Students can select any four electives from graduate courses offered by the School of Business and Management, including BUS 691 Internship Project. As an alternative, students may enroll in an Area of Specialization (see below).

## **MBA** Areas of Specialization

## **Requirements for Areas of Specialization**

In lieu of general electives, student can choose an area of specialization. In order to graduate with an area of specialization, students must complete all courses specified in the desired area in addition to all of the MBA program requirements. Students must take at least three-fourths of the courses in the area of specialization while in residence at National University.

## ▲ Specialization in Accountancy <sup>(†)</sup>

#### (730-000-850)

Faculty Advisor: Connie Fajardo • (916) 855-4137• cfajardo@nu.edu

Designed for those whose undergraduate degree is not in accounting, the goals of this program are to provide students with the accounting knowledge and skills needed to pursue a career in the financial management of a commercial or nonprofit organization and to help prepare students for national certification examinations. Relevant professional designations include Certified Public Accountant (CPA), Certified Management Accounting (CMA), and Certified in Financial Management (CFM).

Note that the specialization courses listed below provide content in accounting subjects other than managerial accounting, since the latter is contained in the required MBA core course, ACC 604 Managerial Accounting. In order to sit for the CPA Exam in California, candidates are required to have a baccalaureate degree in any discipline and to have completed 24 semester units (8 courses; 36 quarter units) in accounting, plus 24 semester units (8 courses; 36 statistics, computer science, and information systems.

Before taking any of the courses in the area of specialization, students are advised to contact a full-time faculty member in the department for a brief interview to review the student's career objectives and educational requirements.

## **Prerequisite for Specialization**

(1 course; 4.5 quarter units)

ACC 201 Financial Accounting Fundamentals

## **Program Requirements**

(4 courses; 18 quarter units)

| ACC 650A | Financial Accounting Theory I  |
|----------|--------------------------------|
|          | (Prerequisite: ACC 201)        |
| ACC 650B | Financial Accounting Theory II |

(Prerequisite: ACC 201) ACC 652 Taxation for Investors and Managers (Prerequisite: ACC 201)

ACC 655 Auditing and Internal Control (*Prerequisite: ACC 201*)

## **Optional Elective**

ACC 657 Accounting Information Systems (*Prerequisite: ACC 201*)

## Specialization in Alternative Dispute Resolution

(730-000-898)

Faculty Advisor: Jack Hamlin • (858) 642-8405 • jhamlin@nu.edu

This area of specialization is designed for students who wish to complete an MBA while focusing their graduate studies in Alternative Dispute Resolution, one of the fastest growing fields in the U.S. and the world at large. The program provides students with a broad knowledge of Alternative Dispute Resolution subjects and enables students to not only become effective mediators and negotiators but to also use these skills to resolve conflict in the workplace. Expertise in Alternative Dispute Resolution is in high demand in the business community, local, state and federal governments, and neighborhood communities.

## **Program Requirements**

(4 courses; 18 quarter units)

| ADR 600 | Alternative Dispute Resolution |
|---------|--------------------------------|
| ADR 605 | Negotiation                    |
| ADR 610 | Facilitation                   |
| ADR 615 | Mediation                      |
|         |                                |

## ▲ Specialization in Electronic Business ℃

(730-000-874) Faculty Advisor: Mohammed Nadeem • (408) 236-1150 • mnadeem@nu.edu

This specialization enables MBA students to become familiar with the principles and theories of electronic business, defined as business conducted on the Internet and/or the World Wide Web. Online marketing, websites, and programming languages are some of the topics covered in the curriculum.

## **Program Requirements**

(4 courses; 18 quarter units)

| ELB 621 | E-Strategies and Business Models                 |
|---------|--|
|         | (Prerequisite: ELB 620)                          |
| ELB 624 | Internet Marketing                               |
| ELB 625 | Electronic Payment Systems and Internet Security |
|         | (Prerequisite: ELB 620)                          |
| ELB 638 | E-Business Information and Knowledge Systems     |
|         | (Prerequisite: ELB 620)                          |

## ▲ Specialization in Financial Management<sup>®</sup>

## (730-000-851)

Faculty Advisor: Gurdeep Chawla • (408) 236-1138 • gchawla@nu.edu

The field of finance has undergone great changes in the last decade and now represents one of the most dynamic activities within companies of all sizes, as well as within nonprofit and governmental organizations. Executives with a background in finance head about one out of every three corporations today.

The financial management program is designed to provide both a sound theoretical and a conceptual framework for financial managers. Special emphasis is placed on growth and diversification policies, evaluation and management of securities portfolios, investment banking and merger strategies, analysis of foreign exchange rate movements, formulation of plans to reduce foreign exchange risk exposure and case and/or research projects dealing with contemporary financial issues.

## **Program Requirements**

(4 courses; 18 quarter units)

| FIN 631 | Security Analysis and Portfolio Management ( <i>Prerequisite: FIN 609A</i> ) |
|---------|--|
| FIN 632 | Managing Financial Resource  |
|         | (Prerequisite: FIN 609A)   |
| FIN 633 | Financing Capital Requirements   |
|         | (Prerequisite: FIN 609Å)   |
| FIN 635 | International Finance  |
|         | (Prerequisite: FIN 609A)   |
|         |  |

## ▲ Specialization in Health Care Administration

## (730-000-858)

Faculty Advisor: Bart Chapman • (858) 642-8391 • bchapman@nu.edu

This area of specialization is designed for students who want to complete an MBA program while focusing their graduate studies in healthcare, one of the largest and fastest growing industries in the U.S. The program teaches students how to apply general business and management skills in the specialized field of healthcare. The required and elective courses provide students with a broad knowledge of healthcare and the unique management and organizational issues inherent to healthcare. Students must take the capstone course in the general MBA program, but they can take the capstone in healthcare administration as well. The residency portion of the healthcare administration program is not required, but is suggested by the healthcare faculty, leaders, and recruiters.

## **Program Requirements**

(4 courses; 18 quarter units)

Students can select any four of the following courses:

| HCA 620A<br>HCA 636<br>HCA 640<br>HCA 641<br>HCA 634 | Health Care Management<br>Ambulatory Care Continuum<br>Biostatistics and Research<br>Eldercare – Issues into Practice                       |
|--|---|
| HCA 629  | Program Planning, Strategic Planning and Evaluation<br>Health Care Finance, Budget and Managed Care<br>Health Care Law, Policy and Politics |

# ▲ Specialization in Human Resource Management ℃

## (730-000-852)

Faculty Advisor: Bernadette Baum • (858) 642-8404 • bbaum@nu.edu

This area of specialization focuses on managing people, the human resource of the organization. Moving beyond common sense and good interpersonal skills, these courses provide students with the knowledge to recruit, select, train, evaluate and compensate employees. Students learn how changes in the workplace, such as governmental regulations, global competition, developing technologies and organizational transformations, influence the performance and productivity of workers. Technical knowledge and practical skills for dealing with a multicultural workforce offer students new ideas on leadership and effective tools for managing human resource.

## **Program Requirements**

(4 courses; 18 quarter units)

Students electing to specialize in human resource management must select four of the following courses.

- HRM 630 Legal, Ethical, and Safety Issues in Human Resource Management
- HRM 633A Seminar in Employee Relations, Labor Relations and Union Management

| ODV 600 | Theory and Practice of Organizational Development   |
|---------|---|
| ODV 601 | Integrating Performance Management, Technology, and |
|         | Organizational Communication                        |
| ODV 606 | Seminar in Training and Development                 |
| ODV 610 | Advanced Studies in Organizational Behavior in a    |
|         | Diverse Society                                     |
| HRM 637 | Workforce Planning, Development, and Outsourcing    |
|         |   |

HRM 667 Compensation and Benefits MGT 651 Managing Safety Issues and Regulations

## ▲ Specialization in International Business ⁄ 🖰

(730-000-853)

Faculty Advisor: Juan España • (858) 642-8448 • jespana@nu.edu

Business activities have an increasingly global reach. To succeed today, business professionals must have a thorough knowledge of the international business environment as well as the ability to operate within individual foreign markets.

In this specialization, students learn how to analyze global trends and national settings so as to identify the optimal approach to foreign market penetration and/or the initiation of international business activities. Specific issues covered include cultural, economic, and legal issues, as well as exporting, franchising, licensing, foreign direct investment, outsourcing, etc. Students develop skills in various areas such as international risk analysis, international human capital development and motivation, international communication, site selection, matching markets, and products/services, etc.

#### **Program Requirements**

(4 courses; 18 quarter units)

| MGT 630 | Global Business Environment            |
|---------|--|
| MGT 637 | Comparative International Management   |
| MGT 680 | Topics in International Business       |
| IBU 653 | Global Business and Strategic Planning |

## ▲ Specialization in Marketing <sup>(†)</sup>

(730-000-855)

Faculty Advisor: Ramon Corona • (858) 642-8427 • rcorona@nu.edu

This area of specialization prepares students with the knowledge and tools they need to perform as a marketing department director or officer. The program emphasizes the global aspects of marketing, the preparation of various specialized plans for marketing, sales, and advertising and the relationship between the marketing department and other departments of the firm.

## **Program Requirements**

(4 courses; 18 quarter units)

| MKT 620 | Consumer Behavior                                   |
|---------|---|
|         | (Prerequisite: MKT 602)                             |
| MKT 631 | Global Marketing                                    |
|         | (Prerequisites: MKT 602)                            |
| MKT 634 | Market Research                                     |
|         | (Prerequisites: MKT 602)                            |
| MKT 660 | Strategic Operational Marketing                     |
|         | (Prerequisites: MKT 602, MKT 620, MKT 631, MKT 634) |

## ▲ Specialization in Organizational Leadership

#### (730-000-888)

Faculty Advisor: Julia Buchanan • (858) 642-8453 • jbuchanan@nu.edu

The purpose of the area of specialization in organizational leadership is to provide students with the skills and theoretical concepts that will assist them when seeking promotions or positions in management and supervision. This area of specialization is designed to prepare diverse adult learners to become effective, changeoriented leaders in an international society by adding distinctive and challenging curricula.

This area of specialization is ideal for individuals who desire to understand the technical and reflective processes that often accompany opportunities to exercise leadership in profit and not-forprofit organizations.

#### **Program Requirements**

(4 courses; 18 quarter units)

| LED 602<br>LED 603 | Developing and Implementing Groups and Teams<br>Organizational Leadership |
|--------------------|---|
| LED 604<br>LED 605 | Change and Adaptation within Organizations                                |
| LED 605            | Negotiation, Bargaining, Conflict Resolution                              |

## Specialization in Technology Management

#### (730-000-857)

Faculty Advisor: Farnaz Sharifrazi • (858) 642-8468 • fsharifrazi@nu.edu

The field of technology management provides students with the essential management skills and understanding to take a proactive role in developing strategies to fully employ technology within their organization.

## **Program Requirements**

(4 courses; 18 quarter units)

| TMG 620 | Principles of Technology Management               |
|---------|---|
| TMG 635 | Strategic Management of Technology and Innovation |
| TMG 640 | Managing Technology Change                        |
| TMG 625 | Systems Analysis and Design                       |

Consult faculty advisor or the Chair of the Department of Computer Science and Information Systems.

## MASTER OF SCIENCE IN CORPORATE AND INTERNATIONAL FINANCE

#### (720-819)

Faculty Advisor: Gurdeep Chawla • (408) 236-1138 • gchawla@nu.edu

The Master of Science in Corporate and International Finance (MSCIF) program prepares students for a professional career in corporate and international finance. This program is designed to provide students with advanced skills in applied finance required in today's competitive international financial environment. It also provides an opportunity for in-depth study of the sophisticated analytical techniques and market transactions that drive financial innovation. Students with MS in Corporate and International Finance will be able to enter into one of four career paths: (1) a financial position in a private domestic and international corporate setting; (2) an investment strategist position; (3) a managerial position in financial institutions; and (4) a treasurer position in various governmental organizations..

## **Program Outcomes**

Upon successful completion of this program, students will be able to:

- Evaluate financial position of organizations through examination of financial statements, budget, financial planning and make proper recommendations.
- Conceptualize a complex issue, analyze it, and build on the existing body of knowledge in the area of finance.
- Integrate information technology and ethics into global financial activities and policies.
- Analyze important corporate financial issues in the overall context of maximization of firm value.

## **Degree Requirements**

(12 courses; 54 quarter units)

To receive a MSCIF, students must complete at least 12 courses for 54 quarter units as described below. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at other institutions, as they apply to this program and provided the units were not used in earning another advanced degree.

## **Program Prerequisites**

(2 courses; 4.5 quarter units)

The following two foundation courses are required for all MSCIF students, but may be waived if a score of 75 percent or above is achieved on a challenge exam. Each is two weeks long: ACC 501 is offered in the first two weeks of an academic month and FIN 501 is offered in the second two weeks. The two courses are offered online and at certain onsite campuses . Grading is "S" for Satisfactory, or "U" for Unsatisfactory. Although these courses do not provide academic credit, they have substantial content that is not covered in the related core courses, and they must be successfully completed to graduate from this program.

| ACC 501 | Accounting Fundamentals            |
|---------|------------------------------------|
| FIN 501 | Finance Fundamentals               |
|         | (Prerequisite: ACC 501 or ACC 201) |

## **Core Requirements**

(12 courses; 54 quarter units)

| FIN 609A | Seminar in Financial Management                                |
|----------|--|
|          | (Prerequisites: FIN 310 and FIN 501)                           |
| FIN 631  | Security Analyses and Portfolio Management                     |
|          | Prerequisite: FIN 609A)  |
| FIN 671  | Credit Management  |
|          | (Prerequisite: FIN 609A)                                       |
| FIN 672  | U.S. and International Accounting Standards                    |
|          | (Prerequisite: FIN 609A)                                       |
| FIN 673  | Valuation: Measuring and Managing the Value of                 |
|          | Corporation  |
|          | (Prerequisite: FIN 609A)                                       |
| FIN 674  | Managing Financial Institutions and Banking                    |
|          | (Prerequisite: FIN 609A)                                       |
| FIN 675  | World Economy, Trade and Finance                               |
|          | (Prerequisite: FIN 609A)                                       |
| FIN 635  | International Finance  |
|          | (Prerequisite: FIN 609A)                                       |
| FIN 676  | International Banking  |
|          | (Prerequisite: FIN 609A)                                       |
| FIN 677  | Financial Derivatives  |
|          | (Prerequisite: FIN 609A)                                       |
| FIN 652  | Real Estate Finance  |
|          | (Prerequisite: FIN 609A)                                       |
| FIN 655  | Finance Research Project (Capstone Course)                     |
|          | (Prerequisites: completion of FIN 609A and at least 36 quarter |
|          | units of core courses)   |
| or       |  |
| MCT(10C  | Curducta Duringer Duringt (Courstance Course)                  |

MGT610C Graduate Business Project (Capstone Course) (Research Project and Business Project options only) (Prerequisites: completion of FIN 609A and at least 36 quarter units of core courses)

## MASTER OF SCIENCE IN ELECTRONIC BUSINESS

### (720-811)

Faculty Advisor: Mohammed Nadeem • (408) 236-1150 • mnadeem@nu.edu

Internet enabled business transactions are making their way into every organization and industry. Today's E-Business environment functions with a changed set of success factors compared to its infancy stage a few years ago. It is not sufficient enough today to design a visually appealing website. E-Business highly complex and multidisciplinary field that requires flexible, innovate and creative skills both in business and Internet technology. Tomorrow's E-Business leaders need to be able to take a holistic and strategic approach to transform their organization and its business processes for E-Business.

The revised National University Master of E-Business program is built upon future robust expertise in the E-Business field and is focused on a promising outlook in a field that will soon become the pillar for the majority of business related transactions.

The new program has a strong managerial and business focus but still expects students to be very familiar with the Internet Technology, Web-authoring tools and Internet applications

## **Program Outcomes**

Upon successful completion of this program, students will be able to:

- 1. Envision, design, implement, and effectively use new models of electronic business.
- Marry the traditional marketplace needs with electronic marketplace capabilities
- 3. Successfully start new e-ventures or manage e-enterprises that operate in a complex, global and competitive environment
- 4. Apply cutting edge e-management theory to real-world business situations
- 5. Meet the demands of current e-businesses and industry to achieve and sustain international competitive advantage

## **MSEB** Transition Program

National University students who completed a transition program as part of their undergraduate degree and who satisfy MSEB transition program requirements described in the catalog description of various undergraduate programs must complete a minimum of 45 quarter units for their MSEB degree. The number of units required for the MSEB program is dependent on the coursework completed in the Bachelors transition program and the grades earned.

## **Degree Requirements**

(12 courses; 54 quarter units)

To receive a Master of Science in Electronic Business, students must complete 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the section in graduate admission requirements for specific information regarding application and matriculation.

## **Core Requirements**

(12 courses; 54 quarter units)

| ELB 621  | E-Strategies and Business Models                  |
|----------|---|
|          | (Prerequisite: ELB 620)                           |
| ELB 622  | E-Business Systems Development                    |
|          | (Prerequisite: ELB 620)                           |
| ELB 623  | Advanced Web Design                               |
|          | (Prerequisite: ELB 620)                           |
| ELB 624  | Internet Marketing                                |
| ELB 625  | Electronic Payment Systems and Internet Security  |
|          | (Prerequisite: ELB 620)                           |
| ELB 635  | E-Logistic and Supply Chain Management            |
|          | (Prerequisite: ELB 620)                           |
| ELB 638  | E-Business Information and Knowledge Systems      |
|          | (Prerequisite: ELB 620)                           |
| ELB 640  | Emerging Communication Technologies in E-Business |
|          | (Prerequisite: ELB 620)                           |
| ELB 656  | Cyber Law and E-Public Policies                   |
| ELB 650A | Master's Research Project I                       |
|          | (Prerequisite: All core requirements)             |
| ELB 650B | Master's Research Project II                      |
|          | (Prerequisite: ELB 650A)                          |
|          |   |

## MASTER OF SCIENCE IN KNOWLEDGE MANAGEMENT

## (720-820)

Lead Faculty: Gary Glen Parks • (858) 642-8414 • gparks@nu.edu

The mission of the Master of Science in Knowledge Management program is to prepare diverse learners to become information resource managers. The program focuses on the study of tacit and explicit knowledge and learning management tools to support decision-making. These skills are needed in government as well as commercial enterprises for the purpose of supporting stated organizational goals and objectives. The curriculum includes management support systems such as mind mapping and expert systems, principles of knowledge audits, identifying knowledge gaps through the use of knowledge maps, and managing them through exploration and exploitation.

The program uses distinctive and challenging curriculum that integrates business, information systems, and leadership development. Graduating students will possess the needed skills to implement strategic management and assure sustained competitive advantages. This degree focuses on the ability to get the right information to the right individuals when needed to change an organization's strategy.

## **Program Outcomes**

Upon successful completion of this program students will be able to:

- Evaluate knowledge within the increasingly complex business environment worldwide.
- Evaluate the process of gathering and making use of a firm's collective expertise.
- Appraise tacit knowledge and explicit knowledge to build sustained competitive advantages.
- Assess through the use of knowledge maps your position in relationship to your competitors and how to close knowledge gaps.
- Evaluate expert knowledge and capture tacit knowledge within an organization.
- Assess the use of knowledge transfer versus knowledge integration.
- Formulate a knowledge management system using prototyping and project management.
- Analysis of the culture within an organization related to change management and group dynamics.

## Requirements

(12 courses; 54 quarter units)

To receive a Master of Science in Knowledge Management, students must complete 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the section in graduate admission procedures for specific information regarding application and evaluation.

## **Core Requirements**

(12 courses; 54 quarter units)

| BKM 600  | Knowledge Management for Business Strategies        |
|----------|---|
| BKM 610  | Managerial Support Systems, DSS and ESS             |
| BKM 615  | Knowledge Audits and Managing Knowledge Gaps        |
| BKM 620  | Knowledge Integration, Transfer, and Sharing        |
| BKM 630  | Knowledge Repositories and Integration Methods      |
| BKM 650  | Enterprise Telecommunications and Global            |
|          | Collaboration                                       |
| LED 604  | Change and Adaptation within Organizations          |
| LED 602  | Developing and Implementing Groups and Teams        |
| BKM 670  | Knowledge Management Design and Development         |
| BKM 680  | Prototyping and Deployment using Project Management |
| BKM 690A | BKM Research Project – Proposal                     |
|          | (Prerequisite: completion of 7 core courses)        |
| BKM 690B | BKM Research Project - Implementation               |
|          | (Prerequisite: BKM 690A)                            |
|          |   |

## ■ MASTER OF SCIENCE IN ORGANIZATIONAL LEADERSHIP (720-815)

## Faculty Advisor: Julia Buchanan • (858) 642-8453 • jbuchanan@nu.edu

The mission of the Master of Science in Organizational Leadership (MSOL) program is to prepare diverse nontraditional learners to become effective, change-oriented leaders in an international society. The program uses distinctive and challenging curriculum that integrates theory with practice, university with community, personal success with ethical service to others, and information technology with creativity, empathy, and democracy.

## **Program Outcomes**

Upon successful completion of this program, students will be able to:

- Apply effective, change-oriented leadership skills in problem solving situations.
- Evaluate leadership styles within the context of an interdependent, pluralistic, global society.
- Integrate leadership theories and practices derived from differing disciplines to change personal and organizational performance.
- Întegrate ethical principles in social and diverse contexts.
- Integrate appropriate technology skills into personal and organizational leadership.
- Use appropriate written and oral presentation skills in discussing, evaluating, comparing, and contrasting organizational setting and leadership.

## Degree Requirements

(12 courses; 54 quarter units)

To receive a Master of Science in Organizational Leadership, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this

degree and provided the units were not used in earning another advanced degree. Refer to the section on graduate admission procedures for specific information regarding application and evaluation.

## Requirements for the Major

(10 courses; 45 quarter units)

| LED 601 | Theories, Practices, and Ethics of Leadership                   |
|---------|---|
| MNS 601 | Statistics for Business   |
| LED 602 | Developing and Implementing Groups and Teams                    |
| LED 603 | Organizational Leadership                                       |
| LED 604 | Change and Adaptation within Organizations                      |
| LED 605 | Negotiation, Bargaining, and Conflict Resolution                |
| LED 606 | Information Management for Leaders                              |
| FIN600  | Finance for Non-Financial Managers                              |
| LED 608 | Seminars in Leadership  |
|         | (Prerequisite: completion of six of the preceding core courses) |
| LED 609 | Capstone Project Course   |
|         | (Prerequisite: MNS 601 and five leadership courses)             |
|         |   |

## **Program Electives**

(2 courses; 9 quarter units)

Each student must complete two graduate courses from the School of Business and Management to meet the electives requirement.

## **Certificate Programs**

Students who are pursuing a bachelor's or master's degree may qualify for one of the certificates listed below provided that the student requests the certificate prior to the completion of their degree program. Certificates will not be issued once a degree has been awarded.

Note: For further information regarding certificate programs, please see an admissions advisor.

## ● Certificate in Accountancy <sup>(†)</sup>

Faculty Advisor: Connie Fajardo • (916) 855-4137 • cfajardo@nu.edu

This program is designed for students who wish to prepare for entry into the accounting profession and seek one of the recognized professional accounting designations, including Certified Public Accountant (CPA), Certified Management Accounting (CMA), and Certified in Financial Management (CFM). All three designations require a baccalaureate degree. Though the degree can be in any discipline, CPA exam candidates in California must have completed 24 semester units (8 courses; 36 quarter units) in accounting or tax and 24 semester units (8 courses; 36 quarter units) in business which includes business law, mathematics, statistics, computer science, and information systems.

Students who wish to pursue a baccalaureate degree, or a second baccalaureate degree, or a master's degree can apply some or all of the academic credits awarded in the certificate program toward that degree, depending upon its requirements.

Before taking any of the courses in the Certificate in Accountancy program, students are strongly advised to contact a full-time accounting faculty member for a brief interview to review the student's career objectives and provide guidance as to the courses to be selected.

## **Certificate Prerequisite**

(1 course; 4.5 quarter units)

## ACC 201 Financial Accounting Fundamentals

(Before taking any other accounting courses in this program, students must complete ACC 201 or its equivalent within two years with a grade of "C"

or better, unless they receive an equivalent grade on an accounting aptitude exam.)

## **Certificate Requirements**

(6 courses; 27 quarter units)

To receive a Certificate in Accountancy, students must complete six of the courses listed below. To assist students in selecting the six courses, the abbreviations in brackets, e.g. [CPA], indicate the professional exam(s) for which that course is most beneficial. "ALL" refers to all three exams: CPA, CMA, and CFM. It should be noted that six courses may not provide all the subject matter covered by these exams. It is strongly recommended that students consult with full-time accounting faculty before enrolling in the Certificate in Accountancy.

## **Undergraduate Series**

(670-000-450)

Available to both undergraduate and graduate students.

| 100.000    |  |
|------------|--|
| ACC 202    | Managerial Accounting Fundamentals [CPA]<br>( <i>Prerequisite: ACC 201</i> ) |
| T ATAZ 204 | ,  |
| LAW 304    | Legal Aspects of Business I [CPA]  |
| ACC 410A   | 0  |
|            | (Prerequisite: ACC 201)  |
| ACC 410B   | Intermediate Accounting II [ALL]   |
|            | (Prerequisite: ACC 201)  |
| ACC 410C   | Intermediate Accounting III [CPA]  |
|            | (Prerequisite: ACC 201)  |
| ACC 431    | Advanced Accounting [CPA]  |
|            | (Prerequisite: ACC 201)  |
| ACC 432A   | Taxation - Individual [CPA]  |
|            | (Prerequisite: ACC 201)  |
| ACC 432B   | Taxation - Business [ALL]  |
|            | (Prerequisite: ACC 201)  |
| ACC 433A   | Managerial Accounting I [CMA]  |
|            | (Prerequisite: ACC 201)  |
| ACC 433B   | Managerial Accounting II [CMA]   |
|            | (Prerequisite: ACC 433A)   |
| ACC 434    | Government and Nonprofit Accounting [CPA]                                    |
|            | (Prerequisite: ACC 201)  |
| ACC 435A   | Auditing I [ALL]   |
|            | (Prerequisite: ACC 201)  |
| ACC 435B   | Auditing II [CPA]  |
|            | (Prerequisite: ACC 435A)   |
|            | •  |
| Craduate   | Carlas   |

## **Graduate Series**

(770-000-850)

## **Certificate Prerequisite**

(1 course; 4.5 quarter units)

ACC 201 Financial Accounting Fundamentals

(Before taking any other accounting courses in this program, students must complete ACC 201 or its equivalent within two years with a grade of "C" or better, unless they receive an equivalent grade on an accounting aptitude exam.)

## **Certificate Requirements**

(6 courses; 27 quarter units)

| ACC 604  | Managerial Accounting               |
|----------|-------------------------------------|
|          | (Prerequisite: ACC 201)             |
| ACC 650A | Financial Accounting Theory I       |
|          | (Prerequisite: ACC 201)             |
| ACC 650B | Financial Accounting Theory II      |
|          | (Prerequisite: ACC 201)             |
| ACC 652  | Taxation for Investors and Managers |
|          | (Prerequisite: ACC 201)             |

| ACC 655 | Auditing and Internal Control  |
|---------|--------------------------------|
|         | (Prerequisite: ACC 201)        |
| ACC 657 | Accounting Information Systems |
|         | (Prerequisite: ACC 201)        |

## ● Graduate Certificate in Electronic Business ✓ 🕆

(770-000-874)

Faculty Advisor: Mohammed Nadeem • (408) 236-1150 • mnadeem@nu.edu

Students may take the certificate program in electronic business. This coursework and the accompanying credits may be transferred to appropriate degree programs if all other requirements for admission to a degree program are met. To receive certification, students are required to successfully complete four courses and to achieve a passing grade on a comprehensive test covering these four areas. No credit is offered for courses taken in this format. This certificate program is designed for individuals who want to become proficient in the new business models and technology involved in conducting business on the Internet and/or the World Wide Web. Qualified people in electronic business are needed as this field of study has matured. E-Business is a complex area of study that requires the ability to integrate managerial, technical and strategic knowledge. Students who later want to pursue a master's degree can apply some or all of the academic credits awarded in the certificate program toward their degrees. To apply these credits to a degree program, students must meet the GPA and other requirements of that degree program.

## **Certificate Requirements**

(5 courses; 22.5 quarter units)

| ELB 620 | Principles of E-Business |
|---------|--------------------------|
|---------|--------------------------|

- ELB 621 E-Strategies and Business Models
- (Prerequisite: ELB 620) ELB 622 E-Business Systems Development
- (Prerequisite: ELB 620) Internet Marketing ELB 624
- Electronic Payment Systems and Internet Security ELB 625 (Prerequisite: ELB 620)

## Undergraduate Certificate in Finance<sup>4</sup>

(670-000-474)

Faculty Advisor: Gurdeep Chawla • (408) 236-1138 • gchawla@nu.edu

This coursework and the accompanying credits may be transferred to appropriate degree programs if all other requirements for admission are met.

A certificate in Finance is designed for students who are interested in strengthening their business acumen, acquiring analytical skills, or supplementing their financial background. Career opportunities include three interrelated areas: financial institutions, investments, and financial management.

Expertise in finance is a sought after and unique skill. This certificate prepares students for managerial responsibilities in organizations such as banks, insurance companies, securities firms, commercial, and not-for-profit organizations. The four courses that comprise this certificate provide a broad yet comprehensive knowledge of financial management.

Upon successful completion, students will have acquired critical skills in the analysis of accounting, market, and economic data. This will prepare them for expanded opportunities in diverse industries.

## **Certificate Prerequisites**

(5 courses; 22.5 quarter units)

| ACC 201 | Financial Accounting Fundamentals    |
|---------|--------------------------------------|
| ACC 202 | Managerial Accounting Fundamentals   |
|         | (Prerequisite: ACC 201)              |
| FIN 310 | Business Finance                     |
|         | (Prerequisite: ACC 201)              |
| FIN 442 | Investments                          |
|         | (Prerequisites: FIN 310 and FIN 440) |
| FIN 443 | Working Capital Management           |
|         | (Prerequisites: FIN 310)             |
|         |                                      |

## **Certificate Requirements**

(4 courses; 18 quarter units)

| FIN 440 | Financial Institutions                                      |
|---------|---|
|         | (Prerequisite: FIN 310)                                     |
| FIN 444 | Risk Management and Insurance                               |
|         | (Prerequisites: FIN 310)                                    |
| FIN 446 | International Financial Management                          |
|         | (Prerequisites: FIN 310)                                    |
| FIN 448 | Seminar in Finance  |
|         | (Prerequisites: FIN 310, FIN 440, FIN 442, FIN 443, and FIN |
|         | 446)  |

## Undergraduate Certificate in Hospitality and Casino Management

#### (670-000-178)

Faculty Advisor: Michael Pickett • (909) 919-7631 • mpickett@nu.edu

This coursework and the accompanying credits may be transferred to the BBA programs if all other requirements for admission are met.

## **Certificate Prerequisite**

(1 course; 4.5 quarter units) MKT 402A Marketing Fundamentals

#### **Certificate Requirements**

(6 courses; 27 quarter units)

| HCM 400 | Principles of Hospitality and Casino Accounting |
|---------|---|
| HCM 410 | Hospitality and Gaming Law                      |
|         |   |

- Hospitality and Casino Marketing HCM 420
- HCM 430 Principles of Hospitality and Casino Staffing
- HCM 440 Cultural Diversity and Hospitality Management
- HCM 450 Native American Tribal Community Development

## Undergraduate Certificate in Human **Resource Management**

(670-000-475)

Faculty Advisor: Bernadette Baum • (858) 642-8404 • bbaum@nu.edu

This certificate is designed for those who wish to gain the knowledge and skills in HRM which are appropriate for professional and supervisory careers in the field of human resource management.

#### **Certificate Requirements**

(4 courses; 18 quarter units)

| HRM 409B | Survey in Human Resource Management and            |
|----------|--|
|          | Organization Development                           |
| HRM 432  | Recruiting, Selection, Promotion, and Retention    |
| HRM 433  | Pay and Benefit Administration, and HR Technology  |
| LIDM 420 | Logal Pagulatory and Labor Polation Concorns in UP |

Legal, Regulatory and Labor Relation Concerns in HRM HRM 439

# ● Graduate Certificate in International Business ℃

(770-000-883)

Faculty Advisor: Juan España • (858) 642-8448 • jespana@nu.edu

This coursework and the accompanying credits may be transferred to appropriate degree programs if all other requirements for admission are met.

This certificate program is designed for students who are either employed by a multinational company or interested in pursuing a career in international business. Expertise in this field is in high demand throughout the world. The four courses included in this certificate provide a comprehensive overview of trade principles and practices as well as a broad knowledge of global markets. Upon successful completion of this certificate, students will have developed skills enabling them to match markets with goods and services from a global perspective.

## **Certificate Prerequisites**

(3 courses; 13.5 quarter units)

| ECO 203   | Principles of Microeconomics |
|-----------|------------------------------|
| MKT 402A  | Marketing Fundamentals       |
| <i>or</i> | Marketing Management         |
| MKT 602A  | Global Economic Geography    |
| ECO 630   | (Prerequisites: ECO 607)     |

## **Certificate Requirements**

(4 courses; 18 quarter units)

| MGT 630 | Global Business Environment          |
|---------|--------------------------------------|
| MGT 637 | Comparative International Management |
| MKT 631 | Global Marketing                     |
|         | (Prerequisite: MKT 602)              |
| ECO 631 | Global Trade Policy and Procedures   |
|         | (Prerequisite: ECO 607)              |

## • Undergraduate Certificate in Marketing

(670-000-476)

Faculty Advisor: Ramon Corona • (858) 642-8427 • rcorona@nu.edu

This coursework and the accompanying credits may be transferred to appropriate degree programs if all other requirements for admission are met. To receive certification, students are required to successfully complete four courses and achieve a passing grade on a comprehensive test covering these four areas.

## **Certificate Requirements**

(4 courses; 18 quarter units)

| MKT 402A | Marketing Fundamentals          |
|----------|---------------------------------|
| MKT 420  | Principles of Consumer Behavior |
|          | (Prerequisite: MKT 402A)        |
| MKT 434  | Introduction to Market Research |
|          | (Prerequisite: MKT 402A)        |
| MKT 443  | Introduction to Advertising     |
|          | (Prerequisite: MKT 402A)        |

## Undergraduate Certificate in Sports Management<sup>2</sup><sup>A</sup>

## Management 🖰

(670-000-179) Faculty Advisor: George Drops • (858) 642-8438 • gdrops@nu.edu

This coursework and the accompanying credits may be transferred to the BBA programs if all other requirements for admission are met.

## **Certificate Requirements**

(6 courses; 27 quarter units)

| SMG 430 | Introduction to Sports Management         |
|---------|---|
| SMG 432 | Principles of Leisure Services Management |
| SMG 433 | Sports Financial Management               |
| SMG 434 | Principles and Problems of Coaching       |
| SMG 435 | Legal Aspects of Sports Administration    |
| SMG 436 | Sports Marketing and Promotions           |

Interim Dean, **C. Kalani Beyer** Ph.D., Curriculum Design University of Illinois at Chicago

Interim Associate Dean, Kenneth Fawson Ph.D., Organization and Leadership University of San Francisco

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The University of Values

## Degree Programs Offered

## **Undergraduate Degrees**

## **Bachelor of Arts**

with a Major in: Early Childhood Education with Concentrations in: Early Childhood Administration Teacher Education Interdisciplinary Studies Concentrating in Early Childhood Education with a Preliminary Multiple Subjects Credential (CA)

## **Graduate Degrees**

## Master of Arts in Teaching

with Areas of Specialization in: Autism Applied Behavior Analysis Best Practices Early Childhood Education Early Childhood Special Education Educational Technology National Board Certified Teacher Leadership Reading Special Education Teacher Leadership Teaching and Learning in a Global Society

## Master of Education Specializing in Cross-

**Cultural Teaching** (*with a Single or Multiple* Subject Credential with BCLAD Option and Intern Credential Option)

## Master of Education Specializing in Best

**Practices** (with a Single or Multiple Subject Credential with BCLAD Option and Intern Credential Option. Sacramento only)

## Master of Education in Teaching

## Master of Science

with Fields of Study in: Applied School Leadership (in Partnership with Santa Clara County Office of Education [SCCOE]) Educational Administration Educational Counseling Exceptional Student Education Instructional Leadership School Psychology Special Education Special Education with an Emphasis in the Deaf and Hard-of-Hearing

## **Nevada Programs**

(Please see Nevada section of this catalog)

Master of Education in Elementary Education with Nevada Licensure Program

Master of Education in Secondary Education with Nevada Licensure Program

Master of Science with Licensure in Special Education (Nevada Only)

## **Credential Programs**

- Preliminary Multiple Subject Teaching Credential Program with BCLAD Option
- Preliminary Single Subject Credential Program with BCLAD Option
- Holders of a Ryan Credential with clad and AB 1059
- Holders of a Preliminary 2042 MS/SS Teaching Credential
- Intern Credential Program for Multiple Subject/Single Subject Teaching

Advanced 5th Year Study – Clear SB 2042 Credential

- Preliminary Tier I Administrative Services Certificate/Credential
- Internship Preliminary Administrative Services Credential - Tier I
- Professional (Tier II) Administrative Services Credential
- Pupil Personnel Services Credential School Counseling (PPSC)
- Pupil Personnel Services Credential School Psychology (PPSP)
- Preliminary Level I Education Specialist Credential: DHH with CLAD Certificate
- Preliminary Level I Education Specialist Credential: DHH with Multiple or Single subject credential
- Preliminary Level I Education Specialist Credential: Mild/Moderate Disabilities with CLAD Certificate
- Preliminary Level I Education Specialist Credential: Moderate/Severe Disabilities with CLAD Certificate
- Preliminary Level I Education Specialist: Mild/Moderate Disabilities with Multiple or Single Subject Credential Concurrent with BCLAD option
- Preliminary Level I Education Specialist: Moderate/Severe Disabilities with Multiple or Single Subject Concurrent Credential with BCLAD option

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contact **The School of Education** in San Diego at **(858) 642-8320 fax: (858) 642-8724** e-mail: **soe@nu.edu** 

## **Special Education Internships**

- Professional Level I Education Specialist Credential: DHH Professional Level I Education Specialist Credential: Mild/Moderate Disabilities
- Professional Level I Education Specialist Credential: Moderate/Severe Disabilities
- Professional Level II Education Specialist: Mild/Moderate Disabilities
- Professional Level II Education Specialist: Moderate/Severe Disabilities

## **Certificate Programs**

Applied Behavior Analysis Autism CA Reading Certificate CLAD Certificate Early Childhood Early Childhood Special Education Educational Technology Certificate National Board Certified Teacher Leadership

A denotes program also offered or partially offered online.

- Note: Not all online programs or courses are offered in entirety via Internet.
- Note: Not all courses or programs listed in this catalog are available at every campus.
- Various undergraduate minors are available in some degree programs.

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## **Undergraduate Degrees**

# BACHELOR OF ARTS Major in Early Childhood Education (610-444)

Lead Faculty: John Carta-Falsa • (714) 429-5135 • jcartafa@nu.edu

The Bachelor of Arts in Early Childhood Education (BAECE) degree program is structured to prepare students to work in a variety of settings involving young children. It is designed according to national and state requirements, and is based on the competencies and guidelines established by the following:

- National Association for the Education of Young Children (NAEYC)
- Child Development Associates Competency Standards (CDA)
- · California Child Development Permit Matrix
- California Pre-Kindergarten Learning Development Guidelines
- National Head Start Association (NHSA)

The program is based on a conceptual framework of current theory, contemporary perspectives, and sound research findings. Focus is on knowledge, attitudes, skills, practice, reflection, and field experiences needed to become efficient, competent, and effective professionals in the field of early childhood education. Emphasis is on designing appropriate learning environments, individual and adaptive curricula, and instructional strategies and techniques to maximize learning outcomes. Topics demonstrated, both in writing and discussion, provide a broad-based foundation of child development in the areas of familial and socio-cultural influences on learning and brain development, parent empowerment, peer cooperation and collaboration, early cognition, emerging literacy (listening, speaking, reading, and writing), ongoing participant observation and appropriate developmental screening assessments, child advocacy, law and ethics, and, most important, play as pedagogy.

## **Program Outcomes**

Upon completion of the Bachelor of Arts in Early Childhood Education, candidates will be able to:

- demonstrate understanding of young children's characteristics and needs, and of multiple interacting influences on children's development and learning, to create environments that are healthy, respectful, supportive, and challenging.
- demonstrate orally and in writing, knowledge, understanding and value of the importance and complex characteristics of children's families and communities.
- understand and use systematic observations, documentation, and other effective assessment strategies in a responsible manner in partnership with families and other professionals to positively influence children's development and learning.
- design, implement and evaluate experiences that promote positive development and learning for all children.
- use positive relationships and supportive interactions as the foundation for their work with young children.
- use a wide array of effective approaches, strategies, and tools to positively influence children's development and learning.
- understand the essential concepts, inquiry tools, and structure of content areas including academic subjects and identify resources to deepen their understanding.
- use their own knowledge and other resources to design, implement, and evaluate meaningful, challenging curriculum that promotes comprehensive developmental and learning outcomes for all young children.
- use ethical guidelines and other professional standards related to early childhood practice.

## **Degree Requirements**

To receive a Bachelor of Arts in Early Childhood Education degree, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upperdivision level. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree.

Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

## Preparation for the Major

(4 courses; 18 quarter units)

| PSY 100 | Introduction to Psychology*                 |
|---------|---|
| ECE 201 | Children: Prenatal Through Middle Childhood |
| ECE 210 | Child, Family, School and Community         |
|         | (Prerequisites: PSY 100 and ECE 201)        |
| HED 220 | Health, Nutrition and Safety                |
|         | (Prerequisites: PSY 100 and ECE 201)        |

\*May be used to meet a general education requirement.

## **Requirements for the Major**

(10 courses; 45 quarter hours)

| ECE 464 | Legal and Ethical Issues in Early Childhood                                    |
|---------|--|
| ECE 310 | (Prerequisite: HED 220)<br>Cultural Pluralism: Impact on Early Childhood       |
|         | Development and Education  |
| ECE 330 | Early Cognition  |
|         | (Prerequisites: ECE 201, ECE 210, HED 220 and ECE 310)                         |
| ECE 410 | Language Acquisition and Emergent Literacy                                     |
| ECE 415 | (Prerequisite: ECE 330)<br>Emergent Curriculum: Designing Curriculum Units for |
| LCL 415 | Young Children   |
|         | (Prerequisite: ECE 330)  |
| ECE 420 | Nature, Numbers and Technology for Teaching Young                              |
|         | Children   |
|         | (Prerequisite: ECE 330)  |
| ECE 430 | Play as Pedagogy   |
|         | (Prerequisite: ECE 330)  |
| ECE 440 | Participant Observations of Young Children for                                 |
|         | Assessment and Curriculum Planning   |
|         | (Prerequisites: ECE 330, ECE 415, and ECE 430)                                 |
| ECE 445 | Meeting Challenges in a Dynamic Learning                                       |
|         | Environment: Effective Strategies in Guiding Behaviors                         |
|         | in Young Children  |
| ECE 450 | (Prerequisites: ECE 330, ECE 415, and ECE 430)                                 |
| ECE 450 | Seminar/Practicum in Early Childhood Education                                 |
|         | (Prerequisite: Student must have successfully completed all $("C" (20))$       |
|         | major courses with an average grade of "C" (2.0) or better in                  |
|         | the core and have approval from his/her faculty mentor.)                       |
|         |  |

## **Upper-Division Electives or Concentration Requirements** (6 courses; 27 quarter units)

Candidates may choose one concentration or a combination of approved elective courses within the concentrations. In addition, students may choose ECE 312, ECE 314 and ECE 490 in combination of approved elective courses within either concentration

- ECE 312 Infant and Toddler Care (Prerequisites: ECE 330 and ECE 430)
- ECE 314 Creative Experiences with Infant and Toddlers (*Prerequisite: ECE 312*)
- ECE 490 Guided Studies in Early Childhood Development (1.5 4.5 quarter units)

## ▲ Concentration in Teacher Education

(354)

Candidates must successfully complete the following courses for a Concentration in Teacher Education in Early Childhood Education. It is recommended that students take these classes after completing the upper-division major requirements and when they are within six (6) months of completing their degree program.

This concentration allows currently enrolled students who are completing their last six courses to register for three prerequisites – HED 602, EDX 1201X, and, EXC 625 – for the California teaching credential program as electives.

Students must complete graduate level coursework taken as part of the BAECE degree with a grade of "B" or better. This coursework will not transfer as graduate level credit to National University or any other University as it is part of an undergraduate degree program. Grades earned in graduate level courses will be calculated as part of the student's undergraduate grade point average.

| ECE 446   | Literature and the Young Child: Read Alouds and |
|-----------|---|
|           | Storytelling                                    |
| HED 602   | Introductory Health Education: K-12             |
| EDX 1201X | Computer Based Technology in the Classroom      |
| EXC 625   | Exceptional Children in the Classroom           |
| ECE 435   | Music, Movement, Drama and Dance                |
| ART 400   | Expressive and Integrative Art                  |
|           | (Prerequisites waived for ECE Majors)           |

## ▲ Concentration in Early Childhood Administration

(353)

Students must successfully complete the following courses for a concentration in Early Childhood Administration. It is recommended that students take these classes toward the end of their program after completing the upper-division major requirements.

| ECE 461 | Intentional Leadership and the Art of Supervision     |
|---------|---|
| ECE 460 | Administrating Early Childhood Programs               |
| ECE 462 | Financial Management and Resources                    |
| HRM 432 | Recruiting, Selection, Promotion, and Retention       |
| ECE 466 | Planning the Physical Environment for the Young Child |
| HUB 401 | Conflict Resolution                                   |
|         | (Prerequisites: ENG 100, ENG 101 and PSY 100)         |

## ◆ INTERDISCIPLINARY STUDIES Concentrating in Early Childhood Education with a California Preliminary Multiple Subjects Teaching Credential

Lead Faculty: John Carta-Falsa • (858) 642-8380 • jcartafa@nu.edu Jacqueline Čaesar • (858) 642 8350 • jcaesar@nu.edu

The Bachelor of Arts in Interdisciplinary Studies (BAIS),

concentrating in Early Childhood Education (ECE) with a California Preliminary Multiple Subjects Teaching Credential provides a broad, rigorous education that prepares candidates for a career as a teacher at early elementary grades. Candidates are introduced to essential knowledge, strategies, techniques and connections across the disciplines as applied to young children. Focus is on an enriched and thought-provoking curriculum that incorporates content across subject areas, specific educational methodology courses and preparation for professional work as multiple subject teachers, primarily for kindergarten through second grade.

## **Program Outcomes**

Upon completion of the Bachelor of Arts in Interdisciplinary Studies (BAIS), concentrating in Early Childhood Education (ECE) with a California Preliminary Multiple Subjects Teaching Credential, candidates will be able to:

- demonstrate an understanding of interdisciplinary theory and practice of critical thinking for the collection, validation, analysis, and synthesis of historical data and new information;
- explain the integration of knowledge in a global context and engage in collaborative research across disciplines;
- identify and appreciate cultural perspectives of world views ;
  use information communications technology for knowledge
- sharing and interdisciplinary approaches;
  demonstrate a deep and flexible understanding of subject matter
- demonstrate application of educational technology to meet the needs of all learners including those with special needs, challenging behaviors, linguistically and culturally diverse students;
- demonstrate knowledge from prenatal to middle childhood development in order to explain how to support growth in cognitive, social, physical and emotional domains;
- utilize different teaching strategies to accomplish teaching and learning goals;
- demonstrate a thorough understanding of learning needs and developmental issues of students to create positive learning environments that ensure healthy human growth;
- demonstrate understanding through use of systematic observations, documentation, and other effective assessment strategies in a responsible manner to facilitate and account for learning, and to support positive growth;
- design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas;
- consider students' knowledge when designing, implementing, and assessing curriculum to promote developmentally appropriate learning outcomes for all children;
- adhere to professional standards and ethics.

## Degree Requirements

To receive a Bachelor of Arts in Interdisciplinary Studies, concentrating in Early Childhood Education with a California Preliminary Multiple Subjects Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Candidates must demonstrate subject-matter competency through a state-approved examination. This major is designed to help candidates for the CSET examinations. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

## I. GENERAL EDUCATION COURSES (70.5 quarter units)

The General Education requirements are listed below

## **AREA A: English Communication**

(15 quarter units required)

## CATEGORY 1 Writing

(10.5 quarter units required)

- ENG 100 Effective College English I (3 quarter units) (Prerequisite: Placement Exam)
- ENG 101 Effective College English II (3 quarter units) (Prerequisite: ENG 100)
- ENG 240 Advanced Composition (Prerequisites: ENG 100/101)

## **CATEGORY 2 Speech and Communication**

(4.5 quarter units required)

COM 100 Introduction to Communications

## AREA B: Mathematical Concepts and Quantitative Reasoning.

(4.5 quarter units required)

| MTH 209A | Structures and Concepts of Mathematical Fundamentals |
|----------|--|
|          | I  |
|          | (Prerequisite: Placement evaluation)                 |

## **AREA C: Information Literacy and Technology**

(4.5 quarter units required)

| ILR 260 | Information Literacy and Report Writing |
|---------|---|
|         | (Prerequisite: ENG 100/101)             |

## **AREA D: Arts and Humanities**

(13.5 quarter units required)

| HIS 233 | World Civilizations I<br>(Prerequisites: ENG 100/101) |
|---------|---|
| or      |   |
| HIS 234 | World Civilizations II                                |
|         | (Prerequisites: ENG 100/101)                          |
| ART 100 | Introduction to Art History                           |
|         | (Prerequisites: ENG 100/101)                          |
| MUS 100 | Fundamentals of Music                                 |

## **AREA E: Social and Behavioral Sciences**

(13.5 quarter units required)

| HIS 220A | History of the United States I (+) (includes study of the |
|----------|---|
|          | Constitution)   |
|          | (Prerequisites: ENG 100/101)                              |
| HIS 350  | Cultural Diversity (+)                                    |

Plus any course from a Social and Behavioral Sciences area. (See General Education section of the Catalog for course offerings in this area.)

## AREA F: Physical and Biological Sciences

(10.5 quarter units required with one lab)

Candidates must take 10.5 quarter units to include one laboratory component. The following are recommended:

| SCI 100  | Survey of Bioscience                                |
|----------|---|
| SCI 100A | Survey of Bioscience Laboratory (1.5 quarter units) |
|          | (Prerequisite: SCI 100)                             |
| SCI 102  | Survey of Physical Science                          |

## AREA G: Modern Language

(9 quarter units required)

See the General Catalog for Modern Language requirement

## II. Preparation for the Major

(24 quarter units required)

TED 320 Introduction to Teaching as a Profession (includes 30 hours of field experience) (1.5 quarter units)

Passage of Basic Skills Requirements Examination and TED 320 are required prior to beginning any TED coursework in the Interdisciplinary Blended Major.

## **III. Requirements for the Interdisciplinary Blended Major** (25 courses; 111 quarter units)

ALL Teacher Education courses (TED) and Early Childhood Education courses (ECE) have field experience components. Students must maintain a 3.0 GPA within all TED coursework. Grades of "D" or "F" are not acceptable in TED courses. All major coursework must be completed and CSET passed prior to student teaching.

## Interdisciplinary Blended Major Requirements

(20 courses; 90 quarter units)

All of the following courses must be taken:

| BIS 301  | Introduction to Interdisciplinary Studies                   |
|----------|---|
| MTH 301  | Structure and Mathematical Foundations II                   |
| COM 380  | Democracy in the Information Age                            |
|          | (Prerequisites: ENG 100/101)                                |
| BIS 401  | Interdisciplinary Practice: Integrating Knowledge with      |
|          | Technology  |
|          | (Prerequisite: BIS 301)                                     |
| ECE 464  | Legal and Ethical Issues in Early Childhood                 |
|          | (Prerequisite: HED 220)                                     |
| ECE 310  | Cultural Pluralism: Impact on Early Childhood               |
|          | Development and Education                                   |
| ECE 330  | Early Cognition   |
|          | (Prerequisites: ECE 201, ECE 210, HED 220 and ECE 310)      |
| ECE 410  | Language Acquisition and Emergent Literacy                  |
|          | (Prerequisite: ECE 330)                                     |
| ECE 415  | Emergent Curriculum: Designing Curriculum Units for         |
|          | Young Children  |
|          | (Prerequisite: ECE 330)                                     |
| ECE 420  | Nature, Numbers and Technology for Teaching Young           |
|          | Children  |
|          | (Prerequisite: ECE 330)                                     |
| ECE 430  | Play as Pedagogy  |
|          | (Prerequisite: ECE 330)                                     |
| ECE 440  | Participant Observations of Young Children for              |
|          | Assessment and Curriculum Planning                          |
|          | (Prerequisites: ECE 330, ECE 415, and ECE 430)              |
| ECE 445  | Meeting Challenges in a Dynamic Learning                    |
|          | Environment: Effective Strategies in Guiding Behaviors      |
|          | in Young Children   |
|          | (Prerequisites: ECE 330, ECE 415, and ECE 430)              |
| ECE 446  | Literature and the Young Child: Read Alouds and             |
|          | Storytelling  |
| TED 330A | Reading and Language Arts Methods – Elementary              |
|          | (Prerequisites: Admission to the Teacher Education Program, |
|          | ENG 100/101, TED 320, TED 300 and TED 310)                  |
| TED 350  | Math and Science Methods                                    |
|          | (Prerequisites: ENG 100/101, TED 320)                       |
| TED 355  | History and Social Science Methods                          |
|          | (Prerequisites: Admissions to the Program, ENG 100/101,     |
|          | TED 320, TED 300 and TED 310)                               |
|          |   |

## Choose one from the following:

| ECE 435<br>ART 329                    | Music, Movement, Drama, and Dance*<br>World Art |
|---------------------------------------|---|
|                                       | (Prerequisites: ENG 100/101)                    |
| MUS 327                               | World Music                                     |
|                                       | (Prerequisites: ENG 100/101 )                   |
| ART 400                               | Expressive and Integrated Arts                  |
| *This course is strongly recommended. |   |

## Choose one from the following:

| SCI 300 | Geography: Mapping the World                         |
|---------|--|
| SCI 301 | Earth and Planetary Science                          |
| SCI 330 | Ecology  |
| SCI 335 | Environment Science                                  |
| SCI 411 | Biodiversity   |
|         | (Recommended: prior completion of SCI 100 & 100A, or |
|         | equivalent)  |
| SCI 450 | Natural History of California                        |

#### **Capstone Course**

BIS 499 Interdisciplinary Studies Project

## **Student Teaching Requirements**

(5 courses; 21 quarter units)

All major requirements must be completed. In addition, candidates MUST pass CSET prior to Student Teaching. RICA may be taken before or after student teaching. TED 470 and TED 465A, B, C, and D are field experience or seminar courses. Grading is by H, S, or U. This grade is not factored into the cumulative GPA.

| TED 465A Student Teaching I                               |      |
|---|------|
| (Prerequisites: Completion of all upper-division course   |      |
| requirements, including all TED coursework)               |      |
| TED 465B Student Teaching II                              |      |
| (Prerequisites: Completion of all upper-division course   |      |
| requirements, including all TED coursework)               |      |
| TED 465C Student Teaching III                             |      |
| (Prerequisites: Completion of all upper-division course   |      |
| requirements, including all TED coursework)               |      |
| TED 465D Student Teaching IV                              |      |
| (Prerequisites: Completion of all upper-division course   |      |
| requirements, including all TED coursework)               |      |
| TED 470 Student Teaching Seminar and e-Portfolio Assessme | ent* |
| (3 quarter units)   |      |
| *Must be taken concurrently with TED 465 A-D.             |      |

Candidates must meet all state of California requirements for the multiple and single subject credential to be recommended to the Commission on Teacher Credentialing. (See Credential Program Requirements)

## **Graduate Degree Programs**

## MASTER OF ARTS IN TEACHING

(710-716)

Program Faculty Advisor: Cynthia J. Schubert • (858) 642-8339 • cschuber@nu.edu

The Master of Arts in Teaching (MAT) degree is designed for practicing educators who want to enhance their teaching skills, broaden their intellectual and professional understanding by interrelating educational theory and practice to promote lifelong learning efforts, and sustain their commitment as instructional leaders in the K-12 settings.

## Program Outcomes

By the end of the MAT program, students are expected to be able to:

- · Reflect on their own teaching practice;
- Build professional relationships/networks;
- Build learning communities within their school/classroom;
- Analyze cross-cultural educational issues;
- Identify, describe, and apply theories of curriculum as they relate to state approved standards;
- Implement standards-based assessment in the classroom, school

and district;

- Use technology for research and teaching;
- · Use multiple teaching models and assessment strategies;
- Implement, assess, and evaluate standards-based curriculum;
- Conduct action research in their teaching.

## **Degree Requirements**

(10 courses; 45 quarter units)

To receive a Master of Arts in Teaching, students must complete 45 quarter units of graduate work. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed, as it applies to this degree and if the units were not used in earning another advanced degree.

Those holding National Board Certification qualify for a waiver of one of the following courses: MAT 641, MAT 642, MAT 643, or MAT 644.

Note: Students must have access to Microsoft Office on either a PC or Mac platform.

## **Core Requirements**

(6 courses; 27 quarter units)

| EDT 612<br>MAT 641 | Creating Meaningful Learning with Technology<br>Cultural Democracy: Contemporary, Local and Global<br>Issues  |
|--------------------|---|
| MAT 642            | Program Design: Curriculum Theory, Design and<br>Assessment   |
| MAT 643            | Models of Teaching, Theories, Applications and Practice   |
| MAT 644            | Foundations and Principles of Curriculum  |
| MAT 640            | Applications of Research for the Art of Teaching<br>(To be taken as the last course in the MAT program)   |
| or                 |   |
| NBC 639            | Applications of Research for the Art of Teaching<br>Capstone Project: The Accomplished Teacher-Leadership<br>Portfolio*<br>(Only for students in the National Board Certified<br>Teacher Leadership Specialization) |
| or                 |   |
| MAT 655            | Leadership Impact: Synthesis of Theory and Practice *<br>(* Only for students in the Teacher Education<br>Specialization)   |
| or                 |   |
| MAT 640C           | Action Research for the Reading Specialization (Only for<br>students in the Reading Specialization)<br>( <i>Prerequisites: Successful completion of MAT 645, MAT 646,</i><br><i>MAT 647A, &amp; MAT 647B</i> )      |

## ▲ Applied Behavior Analysis (ABA) Specialization

#### (903)

Faculty Advisor: Bill Matthew • (661) 864-2360 • wmatthew@nu.edu

The five course sequence in applied behavior analysis is designed to prepare candidates for the national certification examination sponsored by the Behavior Analyst Certification Board. Applicants for the Certification as a Behavior Analyst will have to meet additional requirements to qualify. All five ABA courses must be taken from National University in order to earn this certificate.

Note: Upon successful completion of this five course sequence, the candidate will receive a Certificate of Completion from National University. This is NOT professional certification by the Behavioral Analysis Certification Board, Inc. (BACB) and does NOT entitle the candidate to claim that they are certified behavior analysis or Board Certified Behavior Analysts. Candidates must take the national certification exam and apply for the professional certificate.

Candidates who are pursuing the Master of Arts in Teaching may

qualify for the Certificate in Behavioral Analysis provided that the candidate requests the certificate prior to the completion of their degree program.

Prior to qualifying to take the national Board Certified Behavior Analyst exam, candidates must complete 1500 hours of fieldwork, which is supervised by BACB member. National University does not provide this supervision.

## **Required Courses**

(5 courses; 22.5 quarter units)

| ABA 601 | Basic Behavioral Analytic Principles-I Assessment and |
|---------|---|
|         | Research Design                                       |
|         |   |

- ABA 602 Basic Behavioral Analytic Principles-II Basic Processes (Prerequisites: ABA 601)
- ABA 603 Basic Behavioral Analytic Principles-III: Applications (Prerequisites: ABA 601, ABA 602)
- ABA 604 Advanced Applied Behavior Analysis: Application of Behavioral Principles in School Settings (Prerequisites: ABA 601, ABA 602, ABA 603)
- ABA 605 Advanced Applied Behavior Analysis: Applications of Behavioral Principles in the Technology of Teaching (*Prerequisites: ABA 601, ABA 602, ABA 603, ABA 604*)

## ▲ Autism Specialization and Certificate (904)

This specialization is designed for those interested in working with and teaching students that fall within the Autism Spectrum Disorder. Completion of the specialization extends teaching authorization for students with ASD from 3 through 22.

## **Required Courses**

(4 courses; 18 quarter units)

| EXC 621 | Introduction to Students with Autism Spectrum<br>Disorders (ASD)    |
|---------|---|
| EXC 622 | Assessment and Behavioral Applications in Autism                    |
| EXC 623 | Evidenced-Based Intervention / Instruction for Students with Autism |
| EXC 624 | Autism: Collaboration with Parents and Families                     |

## Additional Requirements for the Certificate and Application Information

After completing their coursework successfully, students must meet with a credential advisor to obtain completed paperwork for the certificate.

## ▲ Best Practices Specialization

(744)

The Best Practices program implements research-based practices that accelerate student achievement. It involves the following effective teaching practices: vocabulary development, comprehensive strategies, accelerated English language learning, higher level questioning, differentiated and targeted instruction, student engagement strategies, cooperative grouping patterns, and standardbased instruction. Along with learning the strategies listed above, candidates will be taught how to create multidisciplinary standardsbased lesson plans.

## **Outcomes for the Specialization**

By the end of the Best Practices specialization, candidates are expected to be able to:

- Use Best Practice teaching strategies across the curriculum.
- Integrate Best Practices for standards-based instruction across content areas.

- Apply to their teaching the framework of Teach, Practice and Apply using Best Practice teaching strategies.
- Implement Best Practice teaching strategies for the development of vocabulary, math, reading comprehension, and interdisciplinary learning.
- Integrate Best Practices in multimedia-interactive classroom instruction.
- Demonstrate a repertoire of differentiated instructional strategies.

## **Required Courses**

(4 courses; 18 quarter units)

- MAT 670 The Theory of Research-Based Best Practice Instruction
- MAT 671 Applied Best Practice Strategies in Classroom Instruction
- MAT 672 Integrating Multimedia-Interactive Technology in Best Practice Instruction
- MAT 673 Differentiated Instruction and Target Teaching

## Early Childhood Education

Specialization/Certificate

(741)

## **Outcomes for the Specialization/Certification**

Upon completion of the ECE specialization/certificate courses, candidates will be able to:

- Analyze and evaluate teaching strengths
- Develop a plan for continued growth in accordance with CTC Professional Growth Manual Guidelines
- Analyze and discuss the strengths, challenges and importance of addressing key transitions
- Create a plan for addressing transition issues that includes all stakeholders: the child, primary caregivers, teachers, administrators, and policy makers.
- Analyze and articulate the strengths and challenges of current research and theory of how children learn upon classroom practice.
- Propose further, action based research that will contribute to the existing research base.
- Modify existing curriculum to include both intentional and differentiated instructional strategies, so that it is developmentally appropriate, integrates content across the core content areas, and includes the appropriate standards and means of assessment.

## **Required Courses**

(4 courses; 18 quarter units)

| ECE 650 | The Early Childhood Teacher                           |
|---------|---|
| ECE 651 | Promoting Child Development and Learning: Transitions |
| ECE 652 | Understanding Young Children: Cognition and the       |
|         | Growing Child   |
| ECE 653 | Effective Teaching Strategies for Young Children      |

## ▲ Early Childhood Special Education Specialization

This specialization is designed for individuals who have completed Level II coursework in special education and hold a Professional Specialist Credential, Mild/Moderate or Moderate/Severe disabilities. Completion of the specialization extends teaching authorization from birth through 22.

## Prerequisites

Completion of Level II coursework in either Mild/Moderate,

Moderate/Severe Education Specialist credential, Learning, Handicapped or Severely Handicapped credentials, and experience in early childhood development with a concentration in infants, toddlers, and preschoolers. Professionals in other fields should schedule an appointment with lead faculty in special education for admission.

## **Required Courses**

(6 courses; 27 quarter units)

| EXC 603 | Typical and Atypical Development in Young Children |
|---------|--|
| EXC 605 | Assessment in Young Children                       |
| EXC 606 | Family Systems & Partnership                       |
| EXC 607 | IFSP Process: Collaboration & Consultation         |
| EXC 608 | Interventions for Young Children with Disabilities |
| EXC 609 | Field Experience                                   |
|         | •  |

## Additional Requirements for the Certificate and Application Information

After completing their coursework successfully, students must meet with a credential advisor to complete the exit paperwork and application for the certificate to the CTC.

## Educational Technology Specialization (745)

## **Required Courses**

(4 courses; 18 quarter units)

| EDT 605  | Tec | hnolo | ogy | and | E | ducation | al ' | Гhe | eor | ies | and | Practices |
|----------|-----|-------|-----|-----|---|----------|------|-----|-----|-----|-----|-----------|
| TREE (10 | -   |       |     |     | ~ |          |      |     |     | -   |     |           |

- EDT 610 Teaching in the Online and Hybrid Environment
- Multimedia and Interactive Technologies EDT 660 EDT 671 Curriculum Design for Online Learning

## National Board Certified Teacher Leadership Specialization and Certificate

#### (897)

Lead Faculty Advisor: Ronarae Adams • (858)642-8352 • radams@nu.edu

The School of Education and National Board Certified Teacher Center provide the following services, opportunities, and program enhancements for new, practicing, and retired practitioners. The fivecourse sequence is designed to meet the needs of two groups of teachers:

- · Those who want to improve their teaching and prepare themselves to achieve National Board Certification sometime during their career
- Those who are active NBCT candidates and want to earn graduate level credit as they develop the required portfolio in response to submission deadlines.

The Specialization/Certificate provides:

- Support and Assistance for Candidates and School Districts
- Access to Resources
- Teacher Leader and Administrator Opportunities
- University Credit
- Celebration and Sharing of Accomplishments.

## Goals for the Specialization/Certificate

The NBCT Leadership specialization supports and activates the following goals:

- · Teachers focus on student learning through systematic study and reflection of their own teaching practices and share their knowledge to form local learning communities.
- Teachers are committed to educating all students by examining cross-cultural educational issues and relating those to enhancing

student learning.

Teachers know how to teach their learners by effectively accessing and using research based learning theories, assessment strategies, teaching models, technology, and classroom management strategies to educate all learners.

## **Required Courses**

(4 courses; 18 quarter units) (NBC 639 is the capstone course and replaces the general MAT 640 required for the Master of Arts in Teaching.)

- Measuring and Informing Quality Teaching and **NBC 680** Learning: Research, Standards, Portfolio and Assessments **NBC 681** Membership in Learning Communities: Professional
- Contributions, Colleagueship, Partnerships, and Continuous Growth
- **NBC 682** Evidence of Student Learning - Entries and Documentation Based on Videotapes
- NBC 683 Evidence of Student Learning - Entries and Documentation Based on Student Student Work Samples and Knowledge of Subject Matter

### Reading Specialization and Certificate (740)

Lead Faculty Advisor: Marilyn Moore • (858)642-8301 • mmoore@nu.edu

This five-course sequence is designed to meet the needs of teachers who already have a valid teaching credential and want to attain a specialty in assessing student reading capabilities and provide appropriate reading instruction in response to those assessments. (MAT 640C is the capstone course and replaces the general MAT 640 required for the Master of Arts in Teaching.)

## **Required Courses**

(4 courses; 18 quarter units)

| MAT 645  | Developing Fluency in Reading                          |
|----------|--|
| MAT 646  | Comprehension Strategies and Procedures                |
| MAT 647A | Field Based Language Arts Assessment and Instruction I |
|          | (Prerequisites: MAT 645, MAT 646)                      |
| MAT 647B | Field Study: Language Arts Assessment and Instruction  |
|          | II   |
|          | (Prerequisites: MAT 645, MAT 646, MAT 647A)            |

Completion of the reading specialization qualifies the candidate for a state of California Reading Certificate. Upon successful completion, the candidate should contact their credential advisor for the reading certification application procedures. All courses must be taken at National University No coursework is accepted from another university for this program and no substitutions are allowed.

## Special Education Specialization

(747) (5 courses; 18 quarter units for students seeking a CA Level II Education Specialist Credential) (905) (4 courses; 18 quarter units for students not seeking a CA Level II Education Specialist Credential)

Individuals who desire to obtain the Level II Education Specialist Credential (CA) must complete the following five courses:

- EXC 656 Best Practices for Special Needs Students
- EXC 657 Community Resources and Transition
- EXC 658 Advanced Specialization in Mild/Moderate Disabilities or

EXC 659 Advanced Specialization in Moderate/Severe Disabilities EXC 655B Exit Seminar (1.5 quarter units)

Individuals who are not seeking the Level II Education Specialist Credential (CA) should complete the following three courses and choose one elective from the below list:

| EXC 656 | Best Practices for Special Needs Students             |
|---------|---|
| EXC 657 | Community Resources and Transition                    |
| EXC 658 | Advanced Specialization in Mild/Moderate Disabilities |
| or      | -   |
| EXC 659 | Advanced Specialization in Moderate/Severe            |
|         | Disabilities  |

Elective:

EXC 615 Technology for Persons with Disabilities

EXC 620 Supporting Positive Behavior

EXC 644 Reading Methods for Special Education

EXC 650 Consultation and Collaboration for Special Education

## ▲ Teacher Leadership Specialization

(899)

Lead Faculty Advisor: Sid Castle • (858) 642-9351 • scastle@nu.edu

This five-course specialization comes from the Advanced Learning Press' Center for Performance Assessment, which offers a unique master's degree program that provides teachers with the skills and theories to be leaders in their classrooms and schools. It is a collaborative effort with Advanced Learning Press, which already offers a ten course master's degree in educational leadership. All the courses will be offered online. Similar to the National Board Specialization, the capstone is an alternative course to MAT 640 Applications of Research for the Art of Teaching. The capstone course is MAT 655 Leadership Impact: Synthesis of Theory and Practice.

## **Required Courses**

(4 courses; 18 quarter units)

| MAT 651 | Developing and Assessing Educational Leaders           |
|---------|--|
| MAT 652 | Leadership for Student and System Accountability       |
| MAT 653 | Leadership Impact on Morale and Motivation             |
| MAT 654 | Advanced Seminar in Issues of Poverty, Race, and Class |

# ▲ Teaching and Learning in a Global Society Specialization

(746)

The Teaching and Learning in a Global Society Specialization is geared to provide candidates with knowledge, skills, and dispositions to effectively teach the increasingly diverse students in our society.

## **Outcomes for the Specialization**

By the end of the Teaching and Learning in a Global Society specialization, candidates are expected to be able to:

- review the literature on the social use of language, critical pedagogy as it relates to the education of students in a diverse classroom, and multicultural literature;
- examine the social factors that produce language varieties and the role of communication (verbal and non-verbal) between cultures;
- critique the major types of attitudes and behaviors towards language and language variations and the speakers of those languages;
- compare and contrast the interaction of language in the home and in the school;
- compare and contrast the changes in societal norms and how that affects the educational and economic success of diverse populations;
- examine historical educational assumptions and the impact of research on new teaching methodologies in a diverse society;

- identify models of community, school and university articulations that counter school resistance by building community;
- begin to work with the ideas of racism, privilege and transforming Whiteness in the classroom;
- conduct scholarly research and writing on issues of multicultural literature, language, race, gender, ethnicity and cultural perspectives.
- describe the social and psychological value of reading multicultural literature and develop ideas for the use of literature in providing children with positive multicultural experiences and cross cultural understanding;
- compare and contrast children's and young adult multicultural literature in relation to the values of various world societies;
- evaluate and discuss effective strategies and classroom applications of current literature in the development of a living literature classroom.

## **Required Courses**

(4 courses; 18 quarter units)

| TED 665 | Cognition, Language and Culture               |
|---------|---|
| TED 666 | The Cultural Foundations of Linguistics       |
| TED 667 | Diversity and Change: A Critical Pedagogy     |
| TED 668 | Survey of Children's Multicultural Literature |

## ■ MASTER OF EDUCATION SPECIALIZING IN CROSS-CULTURAL TEACHING WITH A SINGLE OR MULTIPLE SUBJECT CREDENTIAL WITH BCLAD OPTION AND INTERNSHIP OPTION

(750-710-362/363) (753-710-362/363)-Internship (20 courses; 88.5 quarter units TED-non internship) (18 courses; 79.5 quarter units TED internship)) (21 courses; 93 quarter units BCLAD)

The Master of Education Specializing in Cross-Cultural Teaching is designed for students who are committed to being instructional leaders in the K-12 setting. Courses meet the Commission on Teacher Credentialing (CTC) requirements for a preliminary credential as well as meet requirements for a master's degree that interrelates theory and practice and promotes lifelong learning. The program, which has an internship option, is intended for students who want to obtain a preliminary credential and master's degree at the same time. Students seeking to complete only a master's degree should enroll in the Master of Arts in Teaching. Students who are pursuing a credential and who want to make a program change to the Master of Education in Cross-Cultural Teaching may do so under these conditions:

- The student must make the program change before beginning student teaching,
- The student must pass the subject matter competency exam before enrolling in student teaching and bilingual emphasis students must pass language proficiency examinations.

Note: Students must have access to Microsoft Office on either a PC or Mac platform.

## **Degree Requirements**

To receive a Master of Education Specializing in Cross-Cultural Teaching, students must complete at least 57 quarter units of graduate work, 48 of which must be taken in residence at National University. **Students enrolled in the joint degree-credential program will not be awarded the master's degree until they complete all graduate and credential coursework, including student teaching.** 

#### **Core Requirements**

(4 courses; 18 quarter units TED) (5 courses; 22.5 quarter units BCLAD)

## **Recommended Sequence**

|  | TED 615 | Foundations of Education |
|--|---------|--------------------------|
|--|---------|--------------------------|

- **TED 605** The Diverse Classroom
- TED 611 Educational Psychology
- BTE 612 History and Culture of Latinos (taught in language of emphasis) (BCLAD students only) **MAT 640** Applications of Research for the Art of Teaching
- (must be taken as the last course in the program)

## **Methods Courses**

(4 courses; 18 quarter units)

(Prerequisites: TED 615, TED 605, TED 611, and BTE 612 for BCLAD students)

## **Multiple Subject**

(363/365)

- TED 621A Language Development Methods for the Elementary School (Prerequisites: TED 615 or BTE 612 for BCLAD students
- only) TED/BTE 621B
  - Reading and Language Arts Methods for the Elementary School

(Prerequisites: TED 615 and TED 621A)

TED/BTE 622A

Curriculum and Instruction I: History, Social Studies, Physical Education and Visual and Performing Arts (Prerequisites: TED 615 and TED 621A)

TED/BTE 622B

Curriculum and Instruction II: Mathematics and Science (Prerequisites: TED 615 and TED 621A)

## or

Single Subject (362/364)

- **TED 623** Language Development Methods for Secondary and Middle Schools (Prerequisite: TED 615)
- TED/BTE 625A Curriculum Development for Secondary and Middle Schools (Prerequisites: TED 615 and TED 623)
- TED/BTE 625B Instruction and Classroom Management for Secondary and Middle Schools (Prerequisites: TED 615 and TED 625A or BTE 625A and TED 623)
- TED/BTE 624 Content Area Literacy for the Secondary and Middle Schools (Prerequisites: TED 615 and TED 623)

Note: Courses TED 615, TED 605, TED 611, BTE 612, TED 621A, BTE 621B, TED 621B, TED 622A, BTE 622A, TED 622B, BTE 622B, TED 623, TED 624, BTE 624, TED 625A, BTE 625A, TED 625B, BTE 625B all require four hours of fieldwork in K-12 schools.

Note: Candidates must obtain a Certificate of Clearance from the California Commission on Teacher Credentialing prior to beginning fieldwork in K-12 schools.

## **Co-requisites**

(3 courses; 13.5 quarter units)

These courses can be taken at any time in the program but are recommended prior to student teaching. These courses are required prior to applying for the credential.

HED 602 Introductory Health Education: K-12

EXC 625 Exceptional Children in the Classroom EDT 608 Computer-Based Technology in the Classroom

## Student Teaching and Internship Course Requirements

(5 courses; 21 quarter units for regular student teaching) (3 courses; 12 quarter units for the internship program)

The student teaching and intern courses are required for the preliminary credential, but do not grant graduate credit (except for TED 610, TED 629 or TED 629I).

## **Student Teaching Requirements**

(5 courses; 21 quarter units)

| (Prerequisites: TED | 615, TED 605, TED 611 and BTE/TED 621A,      |
|---------------------|--|
| BTE/TED 621B, BT    | E/TED 622A, BTE/TED 622B; or BTE/TED 623,    |
| BTE/TED 624, BTE/   | /TED 625A, BTE/TED 625B)                     |
| TED 629 Studer      | nt Teaching Seminar (3.0 quarter units)      |
| (must               | be taken concurrently with TED 630A-D or BTE |
| 630A-I              |  |
| BTE/TED 630A        | Beginning Student Teaching                   |
| BTE/TED 630B        | Student Teaching                             |
| (Prereq             | uisite: TED 630A)                            |
| BTE/TED 630C        | Student Teaching                             |
| (Prereq             | uisite: TED 630A)                            |
| BTE/TED 630D        | Student Teaching                             |
| (Prereq             | uisite: TED 630A)                            |
|                     |  |

#### or

## **Internship Requirements**

(3 courses; 12 quarter units) (Prerequisite: Student must be admitted to the internship program)

| TED 610  | Best Internship Practices                           |
|----------|---|
| TED 629I | Intern Student Teaching Seminar (3.0 quarter units) |
| TED 628I | Internship Clinical Practice                        |

An electronic portfolio is required for the assessment of all teacher credential candidates. The purpose of the e-portfolio is for candidates to show how their work in teacher education is linked to their own competency in the TPE Domains. A fee of \$35.00 will be charged to students for the e-portfolio with a renewal cost of \$35 per year.

The portfolio must be reviewed and approved by a National University faculty member prior to exiting the credential program.

Candidates must meet all state of California requirements for the multiple and single subject credential to be recommended to the Commission on Teacher Credentialing. (See Credential Program Requirements)

## Specialization in Cross-Cultural Teaching

The Cross-Cultural Teaching Area of Specialization is geared to providing candidates with knowledge, skills, and dispositions to effectively teach the increasingly diverse students in our society.

By the end of this specialization, candidates are expected to be able to:

- review the literature on the social use of language and critical pedagogy as it relates to the education of students in diverse classroom; review multicultural literature;
- examine the social factors that produce language varieties and the role of communication (verbal and nonverbal) between cultures
- critique the major types of attitudes and behaviors towards language and language variations and the speakers of those languages;
- compare and contrast the interaction of language in the home and in the school;

- compare and contrast the changes in societal norms and how that affects the educational and economic success of diverse populations;
- examine historical educational assumptions and the impact of research on new teaching methodologies in a diverse society;
- identify models of community, school and university articulations that counter school resistance by building community;
- begin to work with the ideas of racism, privilege and transforming Whiteness in the classroom;
- conduct scholarly research and writing on issues of multicultural literature, language, race, gender, ethnicity and cultural perspectives.
- describe the social and psychological value of reading multicultural literature and develop ideas for the use of literature in providing children with positive multicultural experiences and cross cultural understanding;
- compare and contrast children's and young adult multicultural literature in relation to the values of various world societies;
- evaluate and discuss effective strategies and classroom applications of current literature in the development of a living literature classroom.

## **Required Courses**

(4 courses; 18 quarter units)

| TED 665 | Cognition, Language and Culture        |
|---------|--|
| TED 666 | The Cultural Foundation of Linguistics |

- TED 667 Diversity and Change: A Critical Pedagogy
- TED 668 Survey of Children's Multicultural Literature

## ■ MASTER OF EDUCATION (M.ED.) SPECIALIZING IN BEST PRACTICES WITH A SINGLE OR MULTIPLE SUBJECT CREDENTIAL WITH BCLAD OPTION AND INTERNSHIP OPTION

(750-722-362/363) (753-722-362/363)-Internship (20 courses; 88.5 quarter units TED) (21 courses; 93 quarter units BCLAD)

The Master of Education Specializing in Best Practices is designed for students who are committed to completing the requirements for a credential in Multiple Subject or Single Subject in the state of California and specialize in Best Practices. Courses for this degree meet the Commission on Teacher Credentialing (CTC) requirements for a preliminary credential and meet requirements for a master's degree. This program interrelate theory and practice to drive assessment and reflection as bases for sound instructional decision making. The program, which has an internship option, is intended for students who want to obtain a preliminary credential and master's degree at the same time. Students seeking to complete only a master's degree should enroll in the Master of Arts in Teaching. Students who are pursuing a credential and who want to make a program change to the Master of Education specializing in Best Practices may do so under these conditions:

The student must make the program change before beginning student teaching.

The student must pass the subject matter competency exam before enrolling in student teaching.

## **Degree Requirements**

To receive a Master of Education Specializing in Best Practices, students must complete at least 57 quarter units of graduate work, 48 of which must be taken in residence at National University. **Students enrolled in the joint degree-credential program will not be** 

## awarded the master's degree until they complete all graduate and credential coursework, including student teaching.

## **Core Requirements**

(4 courses; 18 quarter units TED) (5 courses; 22.5 quarter units BCLAD)

## **Recommended Sequence**

| TED 615         | Foundations of Education                              |  |
|-----------------|---|--|
| TED 605         | The Diverse Classroom                                 |  |
| TED 611         | Educational Psychology                                |  |
| BTE 612         | History and Culture of Latinos (taught in language of |  |
|                 | emphasis) (BCLAD students only)                       |  |
| MAT 640         | Applications of Research for the Art of Teaching      |  |
|                 | (must be taken as the last course in the program)     |  |
| Methods Courses |   |  |

## (4 courses; 18 quarter units)

(Prerequisites: HED 602, EXC 625, EDT 608, TED 615, TED 605, TED 611, and BTE 612 for BCLAD students)

## **Multiple Subject**

(363/365)

TED 621A Language Development Methods for the Elementary School (Prerequisites: TED 615 or BTE 612 for BCLAD students

(Prerequisites: TED 615 or BTE 612 for BCLAD students only)

## TED/BTE 621B

Reading and Language Arts Methods for the Elementary School

(Prerequisites: TED 615 and TED 621A)

## TED/BTE 622A

Curriculum and Instruction I: History, Social Studies, Physical Education and Visual and Performing Arts (*Prerequisites: TED 615 and TED 621A*)

TED/BTE 622B

Curriculum and Instruction II: Mathematics and Science (Prerequisites: TED 615 and TED 621A)

## or

## Single Subject

(362/364)

- TED 623 Language Development Methods for Secondary and Middle Schools (*Prerequisite: TED 615*)
- TED/BTE 625A Curriculum Development for Secondary and Middle Schools
- (Prerequisites: TED 615 and TED 623) TED/BTE 625B Instruction and Classroom Management for

Secondary and Middle Schools (Prerequisites: TED 615 and TED 625A or BTE 625A and TED 623)

TED/BTE 624 Content Area Literacy for the Secondary and Middle Schools

(Prerequisites: TED 615 and TED 623)

*Note:* Courses TED 615, TED 605, TED 611, BTE 612, TED 621A, BTE 621B, TED 621B, TED 622A, BTE 622A, TED 622B, BTE 622B, TED 623, TED 624, BTE 624, TED 625A, BTE 625A, TED 625B, BTE 625B all require four hours of fieldwork in K-12 schools.

Note: Candidates must obtain a Certificate of Clearance from the California Commission on Teacher Credentialing prior to beginning fieldwork in K-12 schools.

## **Co-requisites**

(3 courses; 13.5 quarter units)

These courses can be taken at any time in the program but are recommended prior to student teaching. These courses are required prior to applying for the credential.

## HED 602 Introductory Health Education: K-12

- EXC 625 Exceptional Children in the Classroom
- EDT 608 Computer-Based Technology in the Classroom

#### Student Teaching and Internship Course Requirements

(5 courses; 21 quarter units for regular student teaching) (3 courses; 12 quarter units for the internship program)

The student teaching and intern courses are required for the preliminary credential, but do not grant graduate credit (except for TED 610, TED 629 or TED 629I).

## **Student Teaching Requirements**

(5 courses; 21 quarter units)

(Prerequisites: TED 615, TED 605, TED 611 and BTE/TED 621A, BTE/TED 621B, BTE/TED 622A, BTE/TED 622B; or BTE/TED 623, BTE/TED 624, BTE/TED 625A,BTE/ TED 625B)

| TED 629                      |        | ent Teaching Seminar (3.0 quarter units)<br>t be taken concurrently with TED 630A-D or BTE<br>-D) |
|------------------------------|--------|---|
| BTE/TED                      | 630A   | Beginning Student Teaching  |
| BTE/TED                      | 630B   | Student Teaching  |
|                              | (Prere | equisite: BTE/TED 630A)   |
| BTE/TED                      | 630C   | Student Teaching  |
| (Prerequisite: BTE/TED 630A) |        |   |
| BTE/TED                      | 630D   | Student Teaching  |
|                              | (Prere | equisite: BTE/TED 630A)   |

or

## **Internship Requirements**

(3 courses; 12 quarter units) (*Prerequisite: Student must be admitted to the internship program.*)

TED 610 Best Internship Practices

TED 6291 Intern Student Teaching Seminar (3.0 quarter units) TED 6281 Internship Clinical Practice

An electronic portfolio is required for the assessment of all teacher credential candidates. The purpose of the e-portfolio is for candidates to show how their work in teacher education is linked to their own competency in the TPE Domains. A fee of \$35.00 will be charged to students for the e-portfolio with a renewal cost of \$35 per year.

The portfolio must be reviewed and approved by a National University faculty member prior to exiting the credential program.

Candidates must meet all state of California requirements for the multiple and single subject credential to be recommended to the Commission on Teacher Credentialing. (See Credential Program Requirements)

## Accelerated Credential Program

Students may be eligible to apply to accelerate their credential program by taking designated courses during student teaching. Eligible candidates must meet minimum qualifications for accelerated studies and will be restricted to the provisions outlined in the Policies and Procedures section. Students approved to accelerate their studies will be limited to register for two courses concurrently while student teaching.

### **Specialization in Best Practices**

The Best Practices program implements research-based practices that accelerate student achievement. The Best Practices program involves the following effective teaching practices: vocabulary development, comprehensive strategies, accelerated English language learning, higher level questioning, differentiated and targeted instruction, student engagement strategies, cooperative grouping patterns, standard-based instruction. Along with learning the strategies listed above, candidates will be taught how to create multidisciplinary standards-based lesson plans.

## **Outcomes for the Specialization**

By the end of the Best Practices specialization, candidates are expected to be able to:

- Use Best Practice teaching strategies across the curriculum.
- Integrate Best Practices for standards-based instruction across content areas.
- Apply to their teaching the framework of *Teach*, *Practice* and *Apply* using Best Practice teaching strategies.
- Implement Best Practice teaching strategies for the development of vocabulary, math, reading comprehension, and interdisciplinary learning.
- Integrate Best Practices in multimedia-interactive classroom instruction.
- Demonstrate a repertoire of differentiated instructional strategies.

#### **Required Courses**

(4 courses; 18 quarter units)

 MAT 670 The Theory of Research-Based Best Practice Instruction
 MAT 671 Applied Best Practice Strategies in Classroom Instruction
 MAT 672 Integrating Multimedia-Interactive Technology in Best Practice Instruction
 MAT 673 Differentiated Instruction and Target Teaching.

## MASTER OF EDUCATION IN TEACHING

(CURRENTLY OFFERED IN OFFSITE COHORTS ONLY)

(750-719-744) Program Equility Advices Lynna Anderson • (858) 642 8330

Program Faculty Advisor: Lynne Anderson • (858) 642-8330 • landerso@nu.edu

The Master of Education in Teaching degree is designed for practicing teachers who are currently working in a school district to complete their Induction program. National University is able to partner with districts to combine a teacher's work in the Induction program with the University's requirements for a master's degree. This program works to combine the work completed in the Preliminary teaching credential, the district Induction program, the Professional Clear SB2042 credential requirements, as well as a particular focus of preparing teachers for National Board Certification.

#### **Program Requirements**

(13 courses; 58.5 quarter units) There are four different components of coursework:

## Component 1 – Preliminary Credential Coursework

(2 courses; 9 quarter units)

Candidates may use two methodology courses completed towards their Preliminary Multiple or Single Subject teaching credential, or complete the two methodology courses that would be required if the candidates wanted to pursue another type of credential (multiple or single subject). Candidates who have taken equivalent courses at another university should submit an e-form course waiver through their Admissions Advisor or Credential Advisor. These courses must be graduate courses; and must not have been utilized in a conferred Masters degree.

## Multiple Subject (choose two)

 BTE/TED 621B Reading and Language Arts Methods for the Elementary School (Prerequisites: TED 615 and TED 621A)
 BTE/TED 622A Curriculum and Instruction I: History, Social Science, Physical Education, Visual and Performing Arts (Prerequisites: TED 615 and TED 621A)

BTE/TED 622B Curriculum and Instruction II: Mathematics and

School of Education

Science

(Prerequisites: TED 615 and TED 621A)

*or* Single Subject (*choose two*)

BTE/TED 625A Curriculum and Development for Secondary and Middle Schools

(Prerequisites: TED 615 and TED 623)

- BTE/TED 625B Instruction and Classroom Management for Secondary and Middle Schools (Prerequisites: TED 615 and TED 625A or BTE 625A and TED 623)
- BTE/TED 624 Content Area Literacy for Secondary and Middle Schools (Prerequisites: TED 615 and TED 623)

## **Component 2 – District Induction Program**

(2 courses; 9 quarter units)

| MTE 600 | Demonstrating Effective Teaching and Learning I:<br>Assessment and Portfolio  |
|---------|---|
| MTE 601 | Demonstrating Effective Teaching and Learning II:<br>Assessment and Portfolio |

## **Component 3 – SB2042 Professional Clear Coursework** (4 courses; 18 quarter units)

National University's partnering with a district Induction program may provide the following courses towards a candidate's SB2042 Professional Clear credential.

| EXC 604 | Exceptionality | y and Diversity | in the | Classroom |
|---------|----------------|-----------------|--------|-----------|
|         | Litteptionant  | , and Diversity |        | ciacoroon |

- HED 620 Coordinated School Health Programs
- EDT 655 Issues and Trends in Educational Technology

MAT 650 Teaching English Language Learners

Once candidates have completed the district Induction program and the courses from Component 3, they may apply for their Professional Clear teaching credential through their employing agency.

## **Component 4 – Specialization in Best Practices** (744)

(5 courses; 22.5 quarter units)

- MAT 670 The Theory of Research-Based Best Practice Instruction
- MAT 671 Applied Best Practice Strategies in Classroom Instruction
   MAT 672 Integrating Multimedia-Interactive Technology in Best Practice Instruction
- MAT 673 Differentiated Instruction and Target Teaching

MAT 640 Applications of Research for the Art of Teaching

## ■ MASTER OF SCIENCE IN APPLIED SCHOOL

## LEADERSHIP (In Partnership with Santa Clara County

Office of Education [SCCOE])

(720-724)

Regional Lead Faculty Advisor: San Jose: Clifford Tyler • (408) 236-1135 • ctyler@nu.edu Santa Clara County Office of Education Lead Advisor: Kathy Hogan, Coordinator School Leadership Services • (408) 453-6974 • Kathy\_Hogan@sccoe.org

This program is designed for students who are committed to improving education and who are interested in advancing their careers by becoming school site or district administrators. This program is offered in collaboration with the Santa Clara County Office of Education (SCCOE) "Leaders in Educational Administration Program" (L.E.A.P), which is comprised of six courses leading to the Preliminary Administrative Services (Tier I) Credential. Students accepted into the program receive full National University graduate credit for the six SCCOE Tier I courses. In addition, students are required to enroll in two additional National University Tier I core courses, not including EDA 620B (Fieldwork in Educational Administration). The EDA 620B National University requirement is met through the completion of 75 hours of on-site administrative fieldwork embedded in the six SCCOE courses. Students must also take an additional four required National University Master of Science in Educational Administration courses for the completion of the Masters of Science in Applied Leadership Degree. Students must also pass the National University Exit Examination required of all candidates pursuing the Preliminary Administration Services Credential and/or Master of Science (MS) in Educational Administration degree.

## Masters Degree/Tier I Learning Outcomes/Program Goals

Upon completion of the program, the student will be able to:

- Facilitate the development, articulation, implementation and stewardship of a vision of teaching and learning that is shared and supported by the school community
- Advocate, nurture, and sustain a school culture and instructional program that is conducive to student learning and staff professional growth.
- Manage an educational organization and its operations and resources to provide a safe, efficient, and effective learning environment.
- Work effectively with families, caregivers and community members; recognize the goals and aspirations of diverse families; respond to diverse community interests and needs; and mobilize community resources in the service of student achievement.
- Examine, practice and model a personal code of ethics, including protecting the rights and confidentiality of students, staff and family and demonstrate professional leadership capacity to include shared decision-making, problem-solving and conflict management and to foster those skills in others.
- Demonstrate an understanding of political, societal, economic, legal and cultural influences on schools; and understand, respond to and influence the larger political, social, economic, legal and cultural context of schools and leadership.
- Reflect on in-session work, fieldwork activities, and on-line work connected with courses completed in the program.
- Engage in the examination of the philosophy of educational leadership, including a study of ethics, through reflective reading of great educational thinkers/leaders.

## Degree Requirements

(12 courses; 54 quarter units)

To receive a Master of Science in Applied School Leadership in partnership with the Santa Clara County Office of Education, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. The student must also pass the National University Educational Administration Tier I Exit Examination required of all candidates pursuing the Preliminary Administrative Services Credential and/or the Master of Science (MS) in Educational Administration.

## **Core Requirements**

(12 courses; 54 quarter units)

- \*EDA 631 Shared Vision of Learning\*\*
- \*EDA 632 Culture of Teaching and Learning\*\*
- \*EDA 633 Management of Schools in the Service of Teaching and Learning\*\*
- \*EDA 634 Working with Diverse Families and Communities\*\*
- \*EDA 635 Introduction to Personal Ethics and Leadership Capacity\*\*

| *EDA 636                | Political, Social, Economic Legal and Cultural         |  |
|-------------------------|--|--|
|                         | Understanding  |  |
| EDA 617                 | Historical and Philosophical foundations of Leadership |  |
| EDA 650                 | Ethics and Leadership in Educational Setting           |  |
| ILD 625                 | Research in Education                                  |  |
| EDA 694 or              | 637 Thesis or Action Research                          |  |
| (Prerequisite: ILD 625) |  |  |

## Plus choose two additional National University Tier I core courses from the following list:

- EDA 623 Curriculum Alignment , Assessment, and Accountability
- EDA 624 Supervision and Evaluation of Instruction
- EDA 625 Technology and Data Analysis for Effective Instruction
- EDA 614 Educational leadership in Schools Today
- EDA 626 Human Resources in Diverse School Communities
- EDA 618 Legal and Ethical Foundations of Education
- EDA 619 Financial Leadership and Management
- EDA 628 Seminar in Educational Leadership and Management (Choices to be jointly determined by the student and National University faculty advisor)

\* Required for the Preliminary Administrative Services Certificate/Credential. This credential is required for most administrative positions in California such as school principals, assistant principals, educational directors and assistant superintendents. \*\*SCCOE Courses

\*\*SCCOE Courses

Fieldwork is required and the requirement is met through the completion of 75 hours of supervised on-site administrative fieldwork embedded in the six SCCOE courses)

## ■ MASTER OF SCIENCE IN EDUCATIONAL ADMINISTRATION

## (720-700)

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This program is designed for students who are committed to improving education and who are interested in advancing their careers by becoming school site or district administrators. It can be completed with or without a credential option for those pursuing a career in the nonpublic education sector.

## Master's Degree/Tier I Program Outcomes/ Goals

Upon completion of the program, the student will be able to:

- Demonstrate an understanding of organizational development, and the benefits of mobilizing human and fiscal resources, restructuring, creating a school environment that identifies institutional needs for diversity and the administrative tasks of the principal and vice principal
- Build consensus among stake-holders, evaluate, analyze and develop new school programs and paradigms
- Understand and apply landmark court cases, legislation, and federal and state regulations governing student rights, due process, delivery of instruction, and general operation of school districts.
- Understand various social and political forces that impact effective school community relations with an emphasis on diversity.

- Understand, evaluate, and apply school district procedures for curriculum implementation and instructional improvement, based on assessment and appropriateness of multi-cultural classroom environments.
- Understand, evaluate, and apply financial policies and practices used in schools and districts, which emphasize federal, state, and local revenue sources as well as district and school budgeting and financial management procedures.
- Examine the total operation of personnel and school management functions and staff development, which includes personnel management and administration, personnel relations, personnel laws, and collective bargaining.
- Make better decisions regarding the management of information technology within the organization, and how information and educational technology can be used to improve instructional programs and drive professional development of the staff.
- Apply his or her acquired understanding and knowledge to a field experience in practical and real-world school settings, which is documented in a portfolio and supervised by a mentor in partnership with the University.
- Engage in the examination of philosophy of educational leadership, including a study of ethics through reflective reading of great educational thinkers/leaders.

## **Degree Requirements**

(13 courses; 58.5 quarter units)

To receive a Master of Science in Educational Administration, students must complete at least 58.5 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Students must also pass an exit examination.

## **Core Requirements**

(13 courses; 58.5 quarter units)

EDA 617 Historical and Philosophical Foundations of Leadership (recommended to be completed as one of the first three courses in the program) EDA 623 Curriculum Alignment, Assessment, and Accountability\* EDA 624 Supervision and Evaluation of Instruction\* ILD 625 Educational Research EDA 625 Technology and Data Analysis for Effective Instruction \* EDA 614 Educational Leadership in Schools Today \* EDA 626 Human Resources in Diverse School Communities \* EDA 618 Legal and Ethical Foundations of Education \* EDA 619 Financial Leadership and Management \* EDA 620B Field Experience in Educational Administration\* (May be taken concurrently with another class or scheduled in an open month. This course takes 3-12 months to complete. It must be completed within 12 months of being scheduled. Students must complete three courses in the credential sequence - EDA 623, EDA 624, EDA 625, EDA 614, EDA 626, EDA 618, EDA 619 before taking this course. This course must be completed in residence. (All students pursuing a career in public school administration, unless approved for the Intern program, must complete EDA 620B.) or EDA 620 C Field Experience

This course must be completed in residence.

or

#### EDA 6201 Intern Field Experience in Educational Administration (open only to students approved for the internship program)

- EDA 628 Seminar in Educational Leadership and Management\*
- EDA 650 Ethics and Leadership in the Educational Setting
  - EDA 694 Thesis

Education

statistics course. Students must have written permission of lead faculty to enroll in the course.)

EDA 637 Action Research (Prerequisite: ILD 625)

\* Required for the Preliminary Administrative Services Certificate/ Credential. This credential is required for most administrative positions in California, such as school principals, assistant principals, educational directors, and assistant superintendents. Students must possess a valid preliminary, professional clear, life, general, or service credential for admission to this credential. An emergency permit does not qualify as an accepted credential for admission.

# ■ MASTER OF SCIENCE IN EDUCATIONAL COUNSELING

(720-701)

or

Program Chair: Susan Eldred (858) 642-8372 seldred@nu.edu Faculty Advisors:

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Los Angeles: Joseph White • (310) 662-2137 • jwhite@nu.edu Sacramento: Joe Cunha • (906) 855-4303 • jcunha@nu.edu San Diego Internship Coordinator: Larry Johnson • (858) 541-7762 • Ijohnson@nu.edu

The Department of Pupil Personnel Services-School Counseling offers a graduate degree leading to the Master of Science in Educational Counseling. This program is aligned with national standards and prepares students for the position of school counselor. Graduates of this program generally seek employment as school counselors in K-12 school districts and must hold a PPSC credential for public school employment.

Students enrolled in the degree and credential program are not awarded the master's degree until they have completed all coursework including practicum and internship. Course equivalence cannot be granted for life experiences.

## **Admission Requirements**

- Complete all program prerequisites.
- All students need to have their previous coursework evaluated by the PPS lead faculty advisor.
- Attend CED 604, (Orientation and Field Experience in School Counseling). Attendance at all sessions and completion of all required assignments is mandatory.
- Receive a credential packet and complete a "candidate statement" that is reviewed and signed by faculty advisor for admission to School of Education.
- Return the credential packet to the credential advisor by the end of CED604, otherwise students will receive an "I" for the course.
- See a credential advisor for specific information regarding any of these requirements. Students are not eligible for financial aid until evaluation is complete.

## Program Advisement

Students who are absent for a period of 12 months or more must reenroll to be re-evaluated under a new catalog. All coursework must be completed within seven years with a 3.0 GPA.

All PPSC students will be assigned a faculty advisor. All students are expected to meet with their assigned faculty advisor upon admission into the program, upon completion of the internship hours, and throughout the program as needed.

Students must maintain a 3.0 GPA. Students who receive a grade of a "C" or lower in more than two courses will be evaluated by the

faculty and will be required to repeat the coursework at their own expense before being allowed to continue in the program. A grade lower than a B- is not accepted in CED 610, CED 611, CED 603, and CED 601.

Students will meet with a faculty advisor for evaluation of prior coursework to meet program prerequisites. Only CED 604 and prerequisites can be taken prior to admission.

It is strongly recommended, but not required, that applicants have one year of related professional experience working with school age children, preferably in a school setting.

## Program Outcomes

Students who successfully complete the program will be able to:

- Identify major theories (personality, social, physical, emotional, and cognitive development) and chronological stages of life-long human development and their impact on school behavior and learning.
- Identify and effectively address relevant social and diversity concerns of individuals and groups of students.
- Demonstrate knowledge and skills to advocate for cultural differences.
- Develop and coordinate prevention, early intervention, and remedial programs and services, appropriate to the diverse needs of the community, school, and district.
- Conduct assessments and use data to plan, develop, and implement guidance programs.
- Develop and present classroom and large group guidance activities through which pupils develop competency in personal/social, academic, and career domains.
- Apply individual counseling methods to help students cope with personal and interpersonal problems.
- Demonstrate knowledge in cross-cultural counseling and recognize the nature of cultural, social, economic, ethnic, linguistic, gender, religious, and other differences as they apply to the counseling process.
- Develop a repertoire of group counseling techniques that can be implemented to help students cope with personal and interpersonal problems.
- Apply a repertoire of skills to effectively counsel individuals regardless of ethnicity, gender, socio-economic level, cultural background, life style, native language, and/or sexual orientation.
- Effectively form positive consultative and collaborative relationships with school staff, parents, and community agencies in support of student academic, career, and personal/social success.
- Effectively plan and implement crisis interventions strategies.
- Develop and implement proactive career development programs.
- Counsel a student on postsecondary requirements.
- Demonstrate knowledge of legal mandates affecting school counselors and apply appropriate legal and ethical standards and practices to specific counseling situations.
- Demonstrate a basic understanding of basic statistics and test construction.
- Understand the Student Assistance Team process and major laws affecting assessment, including IDEA, PL 94-142 and Section 504 of the Rehabilitation Act of 1973.
- Understand the purpose of tests in the following areas: Group and individual achievement and intelligence, learning disabilities, speech and language, adaptive behavior, projective or emotional, and vocational tests.
- Implement an action research project to demonstrate accountability as a school counselor.
- Understand and utilize computer technology relevant to the tasks of school counselors.

## **Degree Requirements**

(22 courses; 94.5 quarter units)

To receive a Master of Science in Educational Counseling, students must complete at least 81.0 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Students are not awarded a master's degree until they have completed all required coursework, including internship and action research (CED 637) or thesis (CED 694). Course equivalence cannot be granted for life experience. Students must complete all coursework with a GPA of 3.0 or better within seven years. Any courses taken more than seven years ago must be repeated.

#### Advancement to Candidacy

After admission as a degree and/or credential seeking student, a student must also advance to candidacy. To qualify for candidacy, a student must:

- Complete prerequisite coursework or equivalent
- Complete CED 604, and four other program requirements. .
- Candidacy review is one of several evaluative steps to help ensure that program objectives are met and that student outcomes are attained.

#### **Program Prerequisites**

(3 courses; 13.5 quarter units)

| MTH 210 | Introduction to Probability and Statistics |
|---------|--|
|         | (Prerequisite: Placement Evaluation)       |
| PSY 301 | Child Development                          |
|         | (Prerequisites: ENG 100/101)               |
| PSY 100 | Introduction to Psychology                 |
|         |  |

Before being formally admitted into this program, students must complete the prerequisite coursework or equivalent.

#### **Program Requirements**

(15 courses; 64.5 quarter units)

| CED 604 | Orientation and Field Experience in School Counseling |
|---------|---|
|         | (1.5 quarter units)                                   |
| TED 611 | Educational Psychology                                |
| CED 600 | Advanced Child and Adolescent Development             |
| CED 602 | Contemporary Issues in School Counseling              |
| CED 606 | Development and Evaluation of School Counseling       |
|         | Programs and Services                                 |
| CED 610 | Advanced Counseling Theories and Techniques           |
|         | (Prerequisite: CED 600)                               |
| CED 611 | Group Counseling                                      |
|         | (Prerequisite: CED 610)                               |
| CED 603 | Multicultural Counseling                              |
|         | (Prerequisites: CED 610)                              |
| CED 601 | Consultation in the Schools                           |
| CED 612 | Career and Academic Counseling                        |
| CED 613 | Psycho-educational Assessment                         |
| CED 614 | Legal and Ethical Practices for School Counselors     |
| PED 676 | Introduction to Applied Behavior Analysis             |
| ILD 625 | Educational Research                                  |
|         |   |

## Choose either:

or

CED 694 Thesis

| (Prerequisite: ILD 625 and successful completion of an           |
|--|
| undergraduate or graduate statistics course. Students must       |
| have written permission of lead faculty to enroll in the course. |
|  |

| CED 637 | School Counseling Action Research |
|---------|-----------------------------------|
|         | (Prerequisite: ILD 625 )          |

## School of Education

complete one of the following in addition to the above core coursework:

((1 course; 4.5 quarter units)

| TED 622A | Curriculum and Instruction I: History, Social Science, |
|----------|--|
|          | Physical Education, Visual and Performing Arts         |
|          | (Prerequisite: TED 615 and TED 621A)                   |
|          |  |

TED 622B Curriculum and Instruction II: Mathematics and Science

#### Practicum (100 hours)

Students are required to complete 100 hours of practicum prior to starting their internship. Students must complete the practicum experience under the supervision of a credentialed and experienced (two years) school counselor. National University school counseling students will complete the 100 hours during school-based practicum experiences that are imbedded within all CED courses. Student performance will be evaluated by a course instructor and a school site school counselor through completion of course requirements.

### Internship Prerequisites

Before students can begin the internship, they must:

- Provide proof of Certificate of Clearance
- Provide verification of a TB Clearance
- Complete prerequisite coursework, 10 CED courses (including CED 610, CED 611, CED 603, CED 601)
- Complete 100 hours of logged, approved practicum
- Submit an Internship application to the internship coordinator/lead faculty and be assigned a University supervisor.
- Pass Basic Skills Requirements

Internships are then scheduled by the placement specialist.

Students should refer to the *PPS Graduate Handbook for School Counseling* for specific information about the practicum and internship requirements.

Note: Students interested in a district-paid internship need to contact a credential advisor for prerequisite and process information.

#### Internship

(4 courses; 16.5 quarter units)

| CED 620 | Best Practices Seminar in School Counseling (3 quarter |
|---------|--|
|         | units)   |
|         | (Must be taken concurrently with internship)           |
| CED 616 | School Counseling Internship Part I                    |
| CED 617 | School Counseling Internship Part II                   |
| CED 618 | School Counseling Internship Part III                  |
|         | 0  |

## **Master's Degree Only Requirements**

(4 courses; 16.5 quarter units)

This is for students that are only pursuing the MS degree in Educational Counseling (without the PPSC credential).

- CED 619 Counseling Practicum Community College CED 620 Best Practices Seminar in School Counseling(3 quarter units)
- And any two of the following courses.
- TED 605 The Diverse Classroom

EDT 660 Multimedia and Interactive Technologies Other electives may be chosen with approval from lead faculty.

#### Exit Requirements

In order to receive a master's degree and PPSC credential, students

Education

must complete courses within seven years and do the following:

- Successful completion of coursework, portfolio, practicum, and internship.
- Successful completion of thesis or action research project.
- Submit completion of the ETS National Praxis examination scores in School Counseling (passage score is 570).
- Submit written evaluations of performance in internship experiences by site supervisor to university supervisor.
- Schedule and pass an Exit interview with faculty advisor and university supervisor.
- Complete online Program Evaluation, form-School Counseling.
- Schedule an exit appointment with credential advisor for final
- clearance and credential documents.
- Have a zero account balance.

\*\*\*\*Exit Interview with University Supervisor and faculty advisor

# ■ MASTER OF SCIENCE IN EXCEPTIONAL STUDENT EDUCATION

#### (720-722)

Lead Faculty: Ennio Cipani • (661) 864-2360 • ecipani@nu.edu The Master of Science in Exceptional Student Education is designed for students who are not residents of or teachers in California and who have a bachelor's degree. It is designed for those who want to become knowledgeable about educational learning problems and strategies to enhance student performance. To receive a Master of Science in Exceptional Student Education, students must complete at least 54 quarter units of graduate work.

A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Course equivalence cannot be granted for life experience. All courses are available online.

## Program Outcomes

By the end of this program, students shall be able to:

- Apply research methods including critiquing and synthesizing current educational literature.
- Utilize a variety of methods and technology applications in order to complete action research and thesis projects.
- Demonstrate expertise in use of technology for instruction as evidenced by the development of adaptive devices, videos, toys/manipulatives, and software.
- Summarize federal and state laws, policies, and major court cases regarding exceptional individuals.
- Design and implement positive behavior supports for students with special needs.
- Utilize skills in instructional design including adaptations required to assist special education learners to achieve state standards-based curriculum.
- Demonstrate consultation and collaboration skills, including the ability to implement professional development at sites/districts for service delivery across all curricular areas and disabilities.
- Locate and utilize appropriate resources and practices in advocating for exceptional individuals.

## **Degree Requirements**

(12 courses; 54 quarter units)

## Prerequisite

(1 course; 4.5 quarter units)

TED 615 The Foundations of Education or a similar course from an accredited university.

## **Core Requirements**

(7 courses; 31.5 quarter units)

| EXC 604 | Exceptionality and Diversity in the Classroom        |
|---------|--|
| EXC 620 | Supporting Positive Behavior                         |
| EXC 615 | Technology for Persons with Disabilities             |
| EXC 644 | Reading and Language Arts Methods for Special        |
|         | Education  |
| EXC 650 | Consultation and Collaboration for Special Education |
| EXC 656 | Best Practices for Special Needs Students            |
| EXC 657 | Community Resources and Transition                   |
|         | •  |

## **Advanced Specialization**

(3 courses; 13.5 quarter units)

| EXC 660  | Instruction of Learners with Mild/Moderate Disabilities |
|----------|---|
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| or      |  |
|---------|--|
| EXC 665 | Instruction of Learners with Moderate/Severe           |
|         | Disabilities   |
| ILD 625 | Educational Research                                   |
| EXC 637 | Action Research  |
|         | (Prerequisite: ILD 625)                                |
| or      |  |
| EXC 694 | Thesis   |
|         | (Prerequisite: ILD 625 and successful completion of an |
|         |  |

(Prerequisite: ILD 625 and successful completion of an undergraduate or graduate statistics course. Students must have written permission of lead faculty to enroll in the course.)

#### Exit Exam

## **Program Elective**

(1 course; 4.5 quarter units)

To complete the Exceptional Student Education program, students can select one elective from the SOE graduate course offerings.

## ■ MASTER OF SCIENCE IN INSTRUCTIONAL LEADERSHIP

(720-723)

This program will develop leadership skills, particularly involving working with school change, for teachers who are interested in being school leaders but are not ready or interested in becoming administrators. A school leader is a teacher who may be involved in leading by serving on school committees, acting as club sponsors or team coaches, and may be involved as a change agent within the school. An administrator is a certified staff member who has an administrative degree and serves in an administrative position. The degree is a collaborative effort between the Teacher Education and Educational Administration Departments. It combines the five National Board Certified Teaching courses and five courses from the Educational Administration program that deal with leadership. At the conclusion of the program, the candidate has the opportunity to submit the portfolios and take the exam required for the National Board for Professional Teaching Standards certification process, receive a Master of Science degree, and be three courses away from an administrative certificate.

## **Degree Requirements**

To receive a Master of Science in Instructional Leadership, candidates must complete 45 quarter units of graduate coursework, 22.5 of which must be taken from the National Certification program and 22.5 quarter units of graduate work from the Educational Administration program.

## National Board Certification

Lead Faculty/Advisor: Ronarae Adams • (858) 642-8352 • radams@nu.edu

## **Goals for National Board Certification**

Teachers focus on student learning through systematic study and reflection of their own teaching practices and share their knowledge to form local learning communities.

Teachers are committed to educating all students by examining crosscultural educational issues and relating those to enhancing student learning.

Teachers know how to teach their subjects by effectively accessing and using research based learning theories and assessment management strategies to educate all learners.

## **Outcomes for National Board Certification**

Graduates will be able to:

- Reflect on their own teaching practice;
- Build professional relationships/networks;
- Build learning communities within their school/classroom;
- Identify, describe, and apply theories of curriculum as they relate to state approved standards;
- Implement standards-based assessment in the classroom, school, and district;
- Use technology for research and teaching;
- Use multiple teaching models and assessment strategies;

## **Courses for National Board Certification**

(5 courses; 22.5 quarter units)

- NBC 680 Measuring and Informing Quality Teaching and Learning: Research, Standards, Portfolio and Assessments
- NBC 681 Membership in Learning Communities: Professional Contributions, Colleagueship, Partnerships, and Continuous Growth
- NBC 682 Evidence of Student Learning: Evidence of Student Learning – Entries and Documentation Based on Videotapes
- NBC 683 Evidence of Student Learning: Entries and Documentation Based on Student Work Samples and Knowledge of Subject Matter

NBC 639 Applications of Research for the Art of Teaching Capstone Project: Accomplished Professional Teacher-Leader

Portfolio

#### **Educational Administration Coursework**

Lead Faculty Advisor: Clifford Tyler • (408) 236-1135 • ctyler@nu.edu

## **Program Outcomes/Goals**

Graduates of the Master of Science in Instructional Leadership program will be able to:

- Acquire knowledge and develop skills associated with restructuring organizations, mobilizing of human and fiscal resources, and creating a school environment that identifies institutional needs for diversity.
- Build consensus among stake-holders.
- Develop the leadership skills necessary to effectively change schools.
- Evaluate, analyze, and develop new school programs and paradigms from the politics of school organizations for the improvement of instruction.
- Implement procedures for curricular improvements based upon assessment and appropriateness of diverse classroom environments.
- Demonstrate instructional leadership in maintaining and increasing teaching effectiveness provided through relevant professional development opportunities.
- Examine and apply education law, codes, and regulations to their

school and school district.

 Institute the use of technology to improve school functions, including generating instructional data, perform analyses, using data to improve instruction, and address legal and ethical issues surrounding educational technology.

## **Core Requirements**

(5 courses; 22.5 quarter units)

| EDA 614  | Educational Leadership in Schools Today                |  |
|--|--|--|
| EDA 618  | Legal and Ethical Foundations in Education             |  |
| EDA 624  | Supervision and Evaluation of Instruction              |  |
| EDA 625  | Technology and Data Analysis for Effective Instruction |  |
| EDA 626  | Human Resources in Diverse Communities                 |  |
| (The Capstone for this program is NBC 639: Applications of Research for          |  |  |
| the Art of Teaching-Capstone Project: The Accomplished Teacher-Leadership        |  |  |
| <i>Portfolio. The capstone takes place at the end of the four courses of the</i> |  |  |

Portfolio. The capstone takes place at the end of the four courses of the National Board Certification coursework, which could be in the middle or at the end of the ten-course program.)

## MASTER OF SCIENCE IN SCHOOL PSYCHOLOGY

#### (720-709)

Program Chair: Susan Eldred • (858) 642-8372 • seldred@nu.edu Faculty Advisors:

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The Department of Pupil Personnel Services-School Psychology offers a graduate degree leading to the Master of Science in School Psychology. This program is aligned with national standards and prepares students for the position of school psychologist. Graduates of this program generally seek employment as a school psychologist in K-12 school districts and must hold a PPSP credential for public school employment.

## Admission Requirements

- Complete all program prerequisites
- All students need to have their previous work evaluated by the PPS lead faculty advisor.
- Attend PED 604, (Orientation and Field Experience in School Psychology), attendance at all sessions and completion of all required assignments is mandatory.
- Receive a credential packet and complete a "candidate statement" that is reviewed and signed by the faculty advisor for admission to the School of Education.
- Return the credential packet to the credential advisor by the end of PED604, otherwise students will receive an "I" for the course.

#### Program Advisement

Students who are absent for a period of 12 months or more must reenroll and be re-evaluated under a new catalog. All coursework must be completed within seven years with a 3.0 GPA.

All PPSP students will be assigned a faculty advisor. All students are expected to meet with their assigned faculty advisor at the following times: (1) upon admission into the program, (2) at several designated checkpoints, (3) before starting their internship, (4) after completion of coursework and (5) at the completion of internship hours. All coursework must be completed within seven years with a 3.0 GPA. Students who are absent for a period of 12 months or more must re-enroll and be re-evaluated under a new catalog.

Education

Students must maintain a 3.0 GPA. Students who receive a grade of a "C" in two or more courses will be evaluated by the faculty and will be required to repeat the coursework at their own expense before being allowed to continue in the program. A grade lower than B- is not accepted in CED 600, PED 665, PED 680 and PED 667.

It is strongly recommended, but not required, that applicants have one year of related professional experience working with school age children, preferably in a public school setting.

## **Program Outcomes**

A student who has successfully completed this program:

- Demonstrates adept/advanced skills in all aspects of psychoeducational assessment; keeps current with technology in the field; presents information and teaches others new assessment techniques; becomes expert at aspects of various disabilities/ learning problems of children and teaches others ways to evaluate
- Demonstrates outstanding leadership skills; well-versed in communicating results and information to others; demonstrates and applies consultation/collaboration techniques and models, and teaches those to others
- Independently researches cutting edge technologies related to learning and learning problems; fully aware of current theories and is adept at instructing others; presents information on advances in the field; is completely competent in practice.
- Demonstrates full implementation of school-wide programs for social/behavioral needs of children; keeps up to date on emerging interventions and techniques; provides in-service training and expertise in the area of social and behavioral interventions
- Demonstrates advanced training and competence in working with individuals with diverse backgrounds; teaches other techniques and concerns for working with individuals of specific backgrounds.
- Demonstrates expertise in school systems knowledge and practice; works at both local and district level in programming and planning for effective schools; is knowledgeable about cutting edge technologies and programs for effective schools and teaches that material to others
- Demonstrates expertise in crisis prevention and intervention; consults with others in developing and implementing programs; demonstrates extensive knowledge in specific health related disorders and school-related safety issues; provides education and training in working with specific student populations
- Demonstrates expertise in collaboration skills; consults with others in developing programs and obtaining resources; acts as a resource to the school and community
- Demonstrates expert knowledge and ability in research; consults with others in developing and evaluating intervention or research plans; continues with independent research; produces published, or publishable, material
- Demonstrates in-depth knowledge of legal issues and shows the highest ethical standards in practice; educates others in developing ethical decision-based models for practice
- Demonstrates in-depth knowledge and understanding of technologies related to the field; can instruct others in the uses available; and can assess and make program or system-wide decisions for technology use.

## Degree Requirements

(30 courses; 123 quarter units)

To receive a Master of Science in School Psychology, students must complete at least 103.5 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Students are not awarded the master's degree until they have completed all graduate and credential coursework, including internship and action research (PED637) or thesis (PED694). Course equivalence cannot be granted for life experience. Students must complete all coursework with a GPA of 3.0 or better within seven years. Any courses taken more than seven years ago must be repeated.

## Advancement to Candidacy

After admission as a degree and credential seeking student, a student must advance to candidacy. To qualify for candidacy, a student must:

- Complete prerequisite coursework or equivalent
- Complete PED 604 and the next four graduate PED courses successfully.

Candidacy review is one of several evaluative steps to help ensure that program objectives are met and that student outcomes are attained.

## **Program Prerequisites**

(4 courses; 18 quarter units)

| MTH 210 | Introduction to Probability and Statistics |
|---------|--|
|         | (Prerequisite: Placement Evaluation)       |
| PSY 430 | Introduction to Psychopathology            |
|         | (Prerequisites: ENG 100/101 and PSY 100)   |
| PSY 301 | Child Development                          |
|         | (Prerequisite: ENG100/101)                 |
| EXC 625 | Exceptional Children in the Classroom      |
|         | •  |

Note: Only PED 604 and prerequisites can be taken prior to admission. Before being formally admitted into the program students must complete the prerequisite coursework.

## **Required Courses**

(21 courses; 87.0 quarter units)

| PED 604 | Orientation and Field Experience in School Psychology |
|---------|---|
|         | (1.5 quarter units)                                   |
| CED 600 | Advanced Child and Adolescent Development             |
| PED 665 | Tests and Measurements                                |
| PED 680 | Roles, Issues and Ethics in School Psychology         |
|         | (Prerequisite: Advancement to Candidacy)              |
| PED 667 | Graduate Seminar in Child/Adolescent                  |
|         | Psychopathology                                       |
| CED 610 | Advanced Counseling Theories and Techniques           |
|         | (Prerequisite: PED 600)                               |
| PED 666 | Graduate Seminar in Human Neuro-psychology            |
|         | (Prerequisite: PED 604)                               |
| PED 683 | Program Evaluation                                    |
| CED 601 | Consultation in the Schools                           |
| PSY 653 | Psychopharmacology                                    |
| PED 670 | Graduate Seminar in Social Psychology                 |
|         | (Prerequisite: Advancement to Candidacy)              |
| PED 671 | Assessment of Cognitive Abilities                     |
|         | (Prerequisites: PED 604, PED 665, PED 680)            |
| PED 672 | Advanced Psycho-Educational Assessment                |
|         | (Prerequisite: PED 671)                               |
| PED 673 | Emotional/Behavioral Assessment                       |
|         | (Prerequisite: PED 672)                               |
| PED 674 | Preschool/Low Incidence Assessment                    |
|         | (Prerequisite: PED 673)                               |
| PED 675 | Alternative Assessment for Multicultural Populations  |
|         | (Prerequisite: PED 674)                               |
| PED 676 | Introduction to Applied Behavior Analysis             |
| PED 677 | Graduate Seminar in Curriculum Assessment and         |
|         | Interventions (1.5 quarter units)                     |
| PED 678 | Practicum in School Psychology (3 quarter units)      |
|         | (Prerequisites: all assessment courses)               |
| ILD 625 | Educational Research                                  |

## Choose either:

PED 694 Th

| Thesis  |
|---|
| (Prerequisite: ILD 625 and successful completion of an            |
| undergraduate or graduate statistics course. Students must        |
| have written permission of lead faculty to enroll in the course.) |
|   |

or DE

PED 637 School Psychology Action Research (Prerequisite: ILD 625)

## Practicum (450 hours)

- Students should refer to the current PPS Graduate Handbook for School Psychology for specific information about the practicum and internship requirements.
- Students are required to complete 450 hours of practicum prior to starting their internship. Students must complete the practicum experience under the supervision of a credentialed and experienced (two years) school psychologist. National University school psychology students will complete schoolbased practicum during the PED 678 course.
- In PED 678 (Practicum in School Psychology) students will do their practicum hours and experiences only in school based settings. Student performance will be evaluated by program faculty and a school site psychologist through completion of course requirements.

## Internship Prerequisites

Before students can begin the internship, they must:

- Complete PED 678
- Provide proof of Certificate of Clearance
- Provide verification of a TB Clearance
- Complete prerequisite coursework, all PED courses (except PED 685)
- Complete 450 hours of logged, approved practicum
- Submit an Internship application to the Internship Coordinator/Lead faculty and be assigned a University Supervisor.
- Pass the Basic Skills Requirements

Internship is then scheduled by the lead faculty or internship coordinator.

Note: Students interested in a district-paid internship need to contact a credential advisor for prerequisite and process information.

## Internship

(1200 hours/2 levels) (5 courses; 21.0 quarter units)

| PED 685 | Best Practices Seminar in School Psychology (3 quarter<br>units)<br>(To be taken concurrently with internship) |
|---------|--|
| PED 687 | School Psychology Internship Part I (300 hours)  |
| PED 688 | School Psychology Internship Part II (300 hours)   |
| PED 689 | School Psychology Internship Part III (300 hours)  |
| PED 690 | School Psychology Internship Part IV (300 hours)   |

\*\*\*\*Exit Interview with University Supervisor

## **Exit Requirements**

In order to receive a Master of Science degree in School Psychology and/or a PPSP credential, students must complete courses within seven years and do the following:

- Successful completion of graduate coursework, portfolio, practicum and internship
- Successful completion of thesis or action research project
- Submit completion of the ETS National Praxis examination

scores in School Psychology (passage score is 590)

- Submit written evaluations of performance in internship experiences by site supervisor to university supervisor
- Schedule and pass exit interview with faculty advisor and university supervisor
- Complete online program evaluation form-School Psychology
- Schedule an exit appointment with credential advisor for final clearance and credential documents
- Have a zero account balance

## ■ MASTER OF SCIENCE IN SPECIAL EDUCATION (720-708)

Program Faculty Advisor: Jane Duckett • (858) 642-8346 • jduckett@nu.edu

Regional Lead Faculty Advisors:

Bakersfield: Maude Taylor • (661) 864-2385 • mtaylor@nu.edu Costa Mesa: Lucinda Kramer • (714) 429-5132 • lkramer@nu.edu Fresno: Ennio Cipani • (559) 256-4943 • ecipani@nu.edu Los Angeles: KayDee Caywood • (310) 258-6672 • kcaywood@nu.edu Sacramento: Denise Hexom • (209) 475-1448 • dhexom@nu.edu San Bernardino: Blanche Cook • (909) 806-3346 • bcook@nu.edu San Diego: Joan Sebastian • (858) 642-8137 • jsebasti@nu.edu San Jose: Joy Kutaka-Kennedy • (650) 594-1334 • jkutakak@nu.edu Stockton: Elizabeth Maloney • (209) 475-1448 • emaloney@nu.edu DHH Lead Faculty Advisor: Colleen L. Smith • (858) 642-8322 • csmith2@nu.edu

The Master of Science in Special Education is designed for educators and other professionals who want to become knowledgeable about educational learning problems and teaching strategies to enhance student performance. To receive a Master of Science in Special Education, students must complete at least 64.5 quarter units of graduate work.

A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Students enrolled in the joint degree credential program are not awarded the master's degree until they have completed all graduate and credential coursework, including student teaching. Course equivalence cannot be granted for life experience. Although many of the following courses are available online, EXC 630 and certain field experiences must be taken onsite.

## **Program Outcomes**

Upon completion of the program:

- Students will demonstrate competence in the application of research methods, including critiquing and synthesizing current education literature.
- Students will demonstrate competence in the ability to apply research methods including technology for research.
- Students will demonstrate consultation and collaboration skills, including the ability to implement professional development at their sites in the area of special education.
- Students will advocate for exceptional individuals.
- Students will understand federal and state laws regarding exceptional individuals.
- Students will demonstrate competence in instructional design including adaptations required to assist special education learners achieve the state standards for curriculum.
- Students will demonstrate competence in positive behavior support.
- Students will demonstrate expertise in use of technology as evidenced by development of adaptive devices, videos, toys/manipulatives, and software.
- Student teachers will demonstrate the ability to actively engage and support all students in learning.

## **Program Objectives**

Upon graduation, students will be expected to:

- Demonstrate the competencies required by the California Commission on Teacher Credentialing and National University, which will qualify them for the Education Specialist credential and an advanced degree.
- Understand the contemporary characteristics, issues, problems, and future directions associated with the delivery of services for students with disabilities.
- Acquire knowledge and skills that will enable them to effectively and creatively carry out their duties as teachers..
- Gain experience and understanding of research and writing processes appropriate to the field of special education.
- Gain experience and understanding of the multicultural issues in the society in which they and their students live, and to devise strategies and techniques for enhancing their students' educational programs.
- Develop an intellectual curiosity and human concern for the problems of individuals and groups, especially those who manifest special needs.
- Know the major sources of information, knowledge, and changing trends in the community that make it possible to keep abreast of changing times and to continue learning upon program completion.

## **Degree Requirements**

(17 courses; 64.5 quarter units)

## **Core Requirements**

(9 courses; 37.5 quarter units)

Field experience courses must be taken at the beginning of the program and may be taken concurrently with other courses.

| EXC 602A | Field Experience: Special Education (3 quarter units) |
|----------|---|
|----------|---|

- EXC 602B Field Experience: Inclusive Settings (3 quarter units)
- EXC 604 Exceptionality and Diversity in the Classroom
- ILD 625 Educational Research
- TED 611 Educational Psychology
- TED 621A Language Development Methods for the Elementary School (Prerequisite: Master's only students are exempt from TEL

(Prerequisite: Master's only students are exempt from TED 615)

- or TED 623 Language Development Methods for Secondary and Middle Schools (Prerequisite: Master's only students are exempt from TED
  - 615)
     EXC 620 Positive Behavior Support
     EXC 630 Assessment and Instructional Planning for Special-Needs Students (one night per week over two months)
     EXC 650 Collaboration and Consultation for Special Education

EXC 650 Collaboration and Consultation for Generic Core Exam

## **Advanced Specialist Requirements**

(7 courses; 22.5 quarter units)

| EXC 644  | Reading and Language Arts Methods for Special           |
|----------|---|
|          | Education (one night per week over two months)          |
| EXC 644A | Field Study: Reading and Language Arts Methods for      |
|          | Special Education (1.5 quarter unit)                    |
| EXC 660  | Instruction of Learners with Mild/Moderate Disabilities |
| EXC 660A | Field Study: Instruction of Learners with Mild/Moderate |
|          | Disabilities (1.5 quarter unit)                         |
| or       | -   |
| EXC 665  | Instruction of Learners with Moderate/Severe            |
|          | Disabilities  |

EXC 665A Field Study: Instruction of Learners with Moderate/Severe Disabilities (1.5 quarter unit) EXC 615 Technology for Persons with Disabilities
 EXC 615A Field Study: Technology for Persons with Disabilities

 (1.5 quarter unit)

 EXC 694 Thesis

 (Prerequisite: ILD 625 and successful completion of an undergraduate or graduate statistics course. Students must have written permission of lead faculty to enroll in the course.)

 or
 EXC 637 Action Research

 (Prerequisite: ILD 625)

Students seeking the Preliminary Level I Education Specialist: Mild/Moderate Disabilities credential must take: EXC 603A Student Teaching Seminar (1.5 quarter units) EXC 685A Student Teaching – Mild/Moderate Disabilities EXC 685B Student Teaching – Mild/Moderate Disabilities

Students seeking the Preliminary Level I Education Specialist: Moderate/Severe Disabilities credential must take: EXC 603A Student Teaching Seminar (1.5 quarter units) EXC 690A Student Teaching – Moderate/Severe Disabilities EXC 690B Student Teaching – Moderate/Severe Disabilities

EXC 685A, EXC 685B, EXC 690A, and EXC 690B do not fulfill elective requirements.

## Exit Exam

(Note: students register for two months for the research courses; but individual projects may take 6-12 months.)

## **Program Elective**

(1 course; 4.5 quarter units)

To complete the Special Education degree program, students can select one elective from the School of Education (SOE) graduate course offerings approved by the Special Education faculty. Students who plan to teach at the secondary level are encouraged to take TED 624.

## ■ MASTER OF SCIENCE IN SPECIAL EDUCATION-EMPHASIS IN THE DEAF AND HARD-OF-HEARING

(720-721)

DHH Lead Faculty Advisor: Colleen L. Smith • (858) 642-8322 • csmith2@nu.edu

The Master of Science in Special Education with an emphasis in the deaf and hard-of-hearing (DHH) is designed for educators and other professionals who want to become knowledgeable about educational learning challenges and teaching strategies to enhance performance of students who are deaf and hard of hearing. To receive a Master of Science in Special Education with an emphasis on deaf and hard of hearing, students must complete at least 81 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Students enrolled in the joint degree credentials program are not awarded the master's degree until they have completed all graduate and credential coursework, including student teaching. Course equivalence cannot be granted for life experience.

## Admission to the Program

Submit the following application documentation in ONE complete packet:

- Application for Admission to Education of the Deaf graduate program
- CD or DVD portfolio of ASL Fluency (video samples, 10 to 12 minutes maximum in length) including the following content:
   1. Introduce yourself and discuss your sign language acquisition experience

2. Narrate an ASL story

3. Narrate a selected work of children's literature

- Intermediate proficiency or better in American Sign Language competencies as assessed by Proficiency Interview
- Personal and professional goals essay (a writing sample, 1 full single spaced page maximum)

Send ONE complete application packet to: DHH Lead Faculty Advisor National University 11255 North Torrey Pines Rd

La Jolla, CA 92037-1011

## **Program Outcomes**

Upon completion of this program, students will be able to:

- Demonstrate graduate level written and oral communication skills and presentation skills.
- · Apply analytical and critical thinking skills.
- Understand current laws with regard to DHH programs and participate in discussions on current issues.
- Understand historical perspective of the education of deaf learners.
- Interact with deaf children and develop collaborative partnerships with their families.
- Learn to interpret nonverbal communication.
- Design lesson plans to expand students' visual intelligence and creativity.
- Design culturally relevant thematic lesson plans.
- Understand and implement ASL and English language planning and development strategies.
- Plan and implement lessons and units for heterogeneous classes of DHH learners, including those with special needs.
- Assess DHH learners, including those who are deaf/blind.
- Demonstrate literacy skills such as guided reading and ASL story-telling.
- Collaborate with healthcare professionals.
- Learn sighted guide techniques.
- Understand various learning theories including multiple intelligences.
- Observe trilingual education programs.
- Interview non-English speakers with DHH children.
- Participate in an IEP meeting.
- Prepare a professional portfolio.

## **Degree Requirements**

## Prerequisites

(10 courses; 43.5 quarter units)

| PSY 100  | Introduction to Psychology (or equivalent course)      |
|----------|--|
| PSY 301  | Child Development                                      |
| 101 001  | (Prerequisite: ENG 100/101)                            |
|          |  |
| PSY 427  | Biological Psychology                                  |
| PSY 431  | Theories and Techniques of Psychological Testing       |
|          | (Prerequisites: ENG 100/101 and PSY 100)               |
| HED 602  | Introductory Health Education: K-12                    |
| EDT 608  | Computer based Technology in the Classroom             |
| EXC 603  | Typical and Atypical Development in Young Children     |
| EXC 604  | Exceptionality and Diversity in the Classroom          |
| EXC 602B | Field Experience: Inclusive Settings (3 quarter units) |
| CLD 627  | Methodology for Cross-Cultural Instruction             |

## **Interdisciplinary Core Courses**

(3 courses; 13.5 quarter units)

- TED 615 The Foundations of Education
- EXC 620 Supporting Positive Behavior
- TED 621A Language Development Methods for the Elementary School

## Generic Core Exam

## Core Courses for the Education Specialist: Deaf and Hardof-Hearing

(8 courses; 36 quarter units)

| DHH 600  | Introduction to Bilingual Education of Learners Who are |
|----------|---|
|          | Deaf or Hard-of-Hearing: Theory and Practice            |
| DHH 601  | Signed Language Acquisition and Development             |
| DHH 602  | Written and Spoken Acquisition and Development          |
| DHH 603  | Assessment of Learners who are Deaf or Hard-of-         |
|          | Hearing   |
| DHH 604  | Development of Literacy with Learners who are Deaf or   |
|          | Hard-of Hearing   |
| DHH 605  | Teaching Deaf Learners with Additional Special Needs    |
| DHH 606  | Curriculum and Instruction in Programs for Deaf and     |
|          | Hard-of-Hearing Learners                                |
| DHH 607  | Bilingual-Multicultural Education of Deaf and Hard-of-  |
|          | 8   |
|          | 0   |
| DIIII007 | Hearing Learners  |

## **Research Coursework**

(2 courses; 9 quarter units)

| ILD 625<br>EXC 637 | Educational Research<br>Action Research |
|--------------------|---|
|                    | (Prerequisite: ILD 625)                 |
| or                 |   |

#### EXC 694 Thesis

(Prerequisite: ILD 625 and successful completion of an undergraduate or graduate statistics course. Students must have written permission of lead faculty to enroll in the course.)

#### Exit Exam

Students seeking the Preliminary Level I Education Specialist- DHH credential must demonstrate Intermediate-high proficiency or better in American Sign Language competence as assessed by Proficiency Interview before taking:

## **Student Teaching**

(3 courses; 12 quarter units)

| DHH 609  | Student Teaching Seminar (3 quarter units)         |
|----------|--|
|          | (Must be taken concurrently with student teaching) |
| DHH 608A | Student Teaching I                                 |
| DHH 608B | Student Teaching II                                |
| or       | -  |

#### **Internship Requirements**

(for those in a DHH Internship program only) (3 courses; 10.5 quarter units)

- EXC 6551 Professional Induction Seminar (3 quarter units over a 2 month period)
   DHH 608I Supervised Teaching for Interns (Deaf and Hard-of-Hearing)
- DHH 609 Student Teaching Seminar (3 quarter units)

## CREDENTIALS

## Teacher Preparation Program Outcomes; Domains of Professional Competence

National University designed the Professional Teacher Preparation program to build teacher candidates' knowledge, skills, and dispositions displayed in integrated coursework and field experiences focused on the demonstration of the Domains of Professional Competence and related Teacher Performance Expectations (TPEs). Building upon foundation courses, Elementary Education content-specific method courses focus on the K-12 stateadopted academic content standards and frameworks in mathematics, language arts, reading, science, history social-science, the visual and performing arts, and physical education.

## Domain A: Making Subject Matter Comprehensible to Students

Teacher candidates exhibit strong working knowledge of subject matter and student development. Candidates organize curriculum to facilitate students' understanding of the central themes, concepts, and skills in the subject area. Teacher candidates interrelate ideas and information within and across curricular areas to extend students' understanding. Candidates use their knowledge of student development, subject matter, instructional resources, and teaching strategies to make subject matter accessible to all students.

## **INTASC Foundations for the Domain**

*Principle 1: Content Knowledge and Foundations* – The candidate demonstrates an appropriate depth of knowledge in all relevant subject areas, understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of subject matter meaningful to students.

*Principle 4: Instructional Strategies* – The candidate understands and uses a variety of instructional strategies to plan learning experiences that encourage students' development of critical thinking, problem solving, and performance skills.

## **Teacher Performance Expectations**

TPE 1 Specific Pedagogical Skills for Subject Matter Instruction

National University's Professional Teacher Preparation program prepares teacher candidates to make subject matter comprehensible to students. Proficient candidates:

- understand major concepts, assumptions, debates, processes of inquiry, and ways of knowing that are central to the disciplines they teach;
- understand how students' conceptual frameworks and their misconceptions for an area of knowledge can influence their learning;
- relate their disciplinary knowledge to other subject areas;
- understand the cognitive processes associated with various kinds of learning and how these processes can be stimulated;
- understand principles and techniques, along with advantages and limitations, associated with various instructional strategies; and
- enhance student learning through the use of a wide variety of materials as well as human and technological resources.

## Domain B: Assessing Student Learning

Teacher candidates establish and clearly communicate learning goals for all students. Candidates collect information about student performance from a variety of sources. They involve all students in assessing their own learning. Teacher candidates use information from a variety of ongoing assessments to plan and adjust learning opportunities that promote academic achievement and personal growth for all students. They exchange information about student learning with students, families, and support personnel in ways that improve understanding and encourage further academic progress.

## **INTASC Foundations for the Domain**

*Principle 8: Assessment* – The candidate understands and uses formal and informal assessment strategies to evaluate and ensure the intellectual, social, and physical development of the learner.

## **Teacher Performance Expectations**

- TPE 2 Monitoring Student Learning During Instruction
- TPE 3 Interpretation and Use of Assessments

National University's Professional Teacher Preparation program prepares teacher candidates to assess student learning. Proficient candidates:

- understand the characteristics, uses, advantages, and limitations
  of different types of assessments for evaluating how students
  learn, what they know and are able to do, and what kinds of
  experiences will support their further growth and development;
- know how to select, construct, and use assessment strategies and instruments appropriate to the learning outcomes being evaluated and to other diagnostic purposes; and
- understand measurement theory and assessment-related issues, such as validity, reliability, bias, and scoring concerns.

## Domain C: Engaging and Supporting All Students in Learning

Teacher candidates build on students' prior knowledge, life experience, and interests to achieve learning goals for all students. They use a variety of instructional strategies and resources that respond to students' diverse needs. Candidates facilitate challenging learning experiences for all students in environments that promote autonomy, interaction, and choice. Teacher candidates actively engage all students in problem solving and critical thinking within and across subject matter areas. Concepts and skills are taught in ways that encourage students to apply them in real-life contexts that make subject matter meaningful. Teacher candidates assist all students to become self-directed learners who are able to demonstrate, articulate, and evaluate what they learn.

## **INTASC Foundations for the Domain**

*Principle 2: Student Development and Characteristics* – The candidate understands how children learn, and can provide learning opportunities that support intellectual, social, and personal development.

*Principle 3: Adapting Instruction to Individual Learning Differences* – The candidate understands how students differ in their approaches to learning and creates instructional opportunities that are developed for diverse learners.

*Principle 6: Language and Communication* – The candidate uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.

## **Teacher Performance Expectations**

- TPE 4 Making Content Accessible
- TPE 5 Student Engagement
- TPE 6Developmentally Appropriate Teaching Practices
- TPE 7 Teaching English Language Learners

National University's Professional Teacher Preparation program prepares teacher candidates to engage and support all students in learning. Proficient candidates:

- understand how learning occurs how students construct knowledge, acquire skills, and develop habits of mind – and know how to use instructional strategies that promote student learning;
- understand that students' physical, social, emotional, moral, and cognitive development influence learning and know how to address these factors when making instructional decisions;
- make appropriate provisions for individual students who have particular learning differences or needs including students with disabilities and English language learners;
- model effective communication strategies in conveying ideas and information and in asking questions; and
- support and expand learner expression in speaking, writing, and other media.

## Domain D: Planning Instruction and Designing Learning Experiences for All Students

Teacher candidates plan instruction that draws on and values students' backgrounds, prior knowledge, and interests. They establish challenging learning goals for all students based on student experience, language, development, and home and school expectations. Candidates sequence curriculum and design long-term and short-range plans that incorporate subject matter knowledge, reflect grade-level curriculum expectations, and include a repertoire of instructional strategies. They use instructional activities that promote learning goals and connect with student experiences and interests. Teacher candidates modify and adjust instructional plans according to student engagement and achievement.

## **INTASC Foundations for the Domain**

*Principle 4: Instructional Strategies* – The candidate understands and uses a variety of instructional strategies to plan learning experiences that encourage students' development of critical thinking, problem solving, and performance skills.

*Principle 7: Instructional Planning* - The candidate plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals.

## **Teacher Performance Expectations**

| TPE 8 | Learning about Students |
|-------|-------------------------|
| TPE 9 | Instructional Planning  |

National University's Professional Teacher Preparation program prepares teacher candidates to plan instruction and design learning experiences for all students. Proficient candidates:

- evaluate how to achieve learning goals, choosing alternative teaching strategies and materials to achieve different instructional purposes and to meet student needs;
- use multiple teaching and learning strategies to engage students in active learning opportunities that promote the development of critical thinking, problem solving, and performance capabilities and that help student assume responsibility for identifying and using learning resources;
- understand learning theory, subject matter, curriculum development, and student development and know how to use this knowledge in planning instruction to meet curriculum goals; and
- select and create learning experiences that are appropriate for curriculum goals, relevant to learners, and based upon principles of effective instruction.

## Domain E: Creating and Maintaining Effective Environments for Student Learning

Teacher candidates create physical environments that engage all students in purposeful learning activities and encourage constructive interactions among students. They maintain safe learning environments in which all students are treated fairly and respectfully as they assume responsibility for themselves and one another. Candidates encourage all students to participate in making decisions and in working independently and collaboratively. Expectations for student behavior are established early, clearly understood, and consistently maintained. Teacher candidates make effective use of instructional time as they implement class procedures and routines.

## **INTASC Foundations for the Domain**

*Principle 5: Learning Environments, Social Interactions, Behavior Management* – The candidate uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation for all students.

## **Teacher Performance Expectations**

| TPE 10 | Instructional Time |
|--------|--------------------|
| TPE 11 | Social Environment |

National University's Professional Teacher Preparation program prepares teacher candidates to create and maintain effective environments for student learning. Proficient candidates:

- create a smoothly functioning learning community in which students assume responsibility for themselves and one another, participate in decision-making, work collaboratively and independently, and engage in purposeful learning activities;
- use effective classroom management and a range of strategies to promote positive relationships, cooperation, and purposeful learning in the classroom;
- engage students in individual and cooperative learning activities that help them develop the motivation to achieve; and
- organize, allocate, and manage the resources of time, space, activities, and attention to provide active and equitable engagement of students in productive tasks.

## Domain F: Developing as a Professional Educator Hawaii Teacher Performance Standard X: Fosters Parent and School Community Relationships

Teacher candidates create physical environments that engage all students in purposeful learning activities and encourage constructive interactions among students. They maintain safe learning environments in which all students are treated fairly and respectfully as they assume responsibility for themselves and one another. Candidates encourage all students to participate in making decisions and in working independently and collaboratively. Expectations for student behavior are established early, clearly understood, and consistently maintained. Teacher candidates make effective use of instructional time as they implement class procedures and routines.

## **INTASC Foundations for the Domain**

*Principle 9: Professionalism and Ethical Practice* – The candidate is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.

*Principle 10: Collaboration* – The candidate fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well-being.

## **Teacher Performance Expectations**

TPE 12Professional, Legal and Ethical ObligationsTPE 13Professional Growth

## INFORMATION FOR BLENDED BACHELOR'S/CREDENTIAL PROGRAMS

## Credential Information Applicable to All Undergraduate Blended Programs

Certain credential programs may require enrollment into an electronic portfolio. Please see your credential advisor for further information.

## **Admission Requirements**

Students seeking admission to a blended bachelor's program (bachelor's degree and credential or licensure) at National University should refer to the academic information for undergraduate admission procedures.

### Admission Process

In addition to the admission requirements listed in the "General Admission Procedures" section of this catalog, applicants to all of National University's credential programs must proceed through the following admissions procedure:

**Stage 1:** Students meet with an admission advisor and complete an admissions packet. Students who meet the listed criteria are admitted on a "provisional" basis with an estimated program of study.

**Stage 2:** All credential students must attend a Faculty/Credential Advisement orientation and complete a candidate statement prior to the completion of TED 320 where specific credentialing requirements will be addressed. The candidate statement must be reviewed and signed by the faculty advisor for admission to the School of Education.

**Stage 3:** Students must complete the credential packet and return this to the credential advisor.

Students are not eligible for financial aid until the evaluation is complete.

Students transferring from a teacher education program from another university must provide a letter of good standing. Students who have coursework in transfer that may meet coursework requirements at National University should coordinate with their admissions advisor.

### **Credential Residency Requirements**

All students enrolled in a blended bachelor's program must meet the undergraduate residency requirements as specified in the degree. ALL student teaching courses MUST be taken in residency and may not be waived. Courses taken online are considered to be inresidence.

All Teacher Education coursework (TED) must be completed with a GPA of 3.0 ("D" and "F" grades are not accepted and must be repeated).

Students who are absent for a period of 12 months or more must reenroll and be re-evaluated under a new catalog.

All credential courses are valid for seven years.

### **The Student Agreement**

To ensure that graduates of National University's teaching and services credential programs are able to meet the legal requirements of the Commission on Teacher Credentialing (CTC), all applicants for admission to education credential programs must enter into a student agreement. A copy of the student agreement is contained in the credential information packet that is available from a credential advisor in the advisement orientation meeting.

The student agreement gives National University the right to suspend or terminate the student's participation in the credential program upon a showing that the student has:

- committed acts or engaged in conduct that could constitute grounds for denial of a credential;
- failed to demonstrate the requisite skills and qualifications to satisfy the requirements for a credential; or
- demonstrated other qualities or behaviors enumerated in the student agreement inconsistent with National University's recommendation of the student for an education credential. The student agreement also authorizes National University to release to the Commission all pertinent information pertaining to the student's qualification or fitness for a credential.

## Student Assistance, Notice of Need to Improve, and Dismissal from School of Education Programs

National University is committed to maintaining quality standards throughout its credential programs and to graduating competent professional educators. As required by the California Commission on Teacher Credentialing (CTC), National University identifies and assists students who need special assistance, and retains in its programs only those students who are suited for entry to or advancement in the education profession. The CTC is charged by the state with evaluating the moral character and fitness of all persons who wish to teach or perform certified services in California public schools. Every person who is an applicant for, or who now holds any credential, certificate, permit, or license authorizing service in California public schools is answerable to the CTC and the Committee on Credentials for his or her fitness-related conduct. California's Laws and Rules Pertaining to the Discipline of Professional Certificated Personnel (2002), available on the CTC website at www.ctc.ca.gov, address legal, ethical, and behavioral standards to which all such persons must adhere.

If a student is identified as being deficient or needing assistance to meet program standards at any point during his or her program, the student's instructor of record during coursework or University supervisor during a fieldwork assignment will issue the student a Professional Growth and Development Plan. The plan will indicate one of three possible actions that the instructor/supervisor intends to recommend to the lead faculty in the program:

- 1. The student is identified as needing improvement in designated areas. A plan of improvement, with an expected date of completion, is attached to the form. The student will be permitted to continue taking classes or continue in his/her fieldwork assignment while completing the plan.
- 2. The student is identified as needing improvement in designated areas. A plan of improvement, with an expected date of completion, is attached to the form. The student receives a failing grade in the class or an unsatisfactory grade in the fieldwork assignment. The student will not be permitted to continue taking classes or continue in his/her fieldwork assignment until the plan is completed and the class or fieldwork assignment is re-taken, at the student's expense.
- 3. The student is identified as being unsuited for the education profession and is recommended for dismissal from the program.

Upon receiving a Professional Growth and Development Plan, the student will meet with his/her instructor of record or University supervisor, along with the regional lead faculty and/or the lead supervisor. This Faculty Assistance Team will discuss any recommended plan of improvement with the student and will later meet with the student to evaluate the student's performance of the expectations listed on the plan.

If the candidate is allowed to continue in the program and receives a second unsatisfactory grade in a practicum or student teaching assignment, the student will be recommended for dismissal from the program. The process for a hearing and appeal, upon recommendation for dismissal from a program, is outlined in the Policies and Procedures section of this catalog.

### Program Advisement

Every credential program has an assigned faculty advisor who is available to provide program specific advisement related to a specific program field. The faculty advisor name and contact information is listed in the catalog under the heading of specific programs. These advisors are a resource for specific questions students may have about classes, curriculum, and instructors.

Each student also has a credential advisor available to them to help navigate the specifics of the state credentialing requirements. These requirements can vary and are in constant flux due to changing legislation and the dynamic nature of public education. It is very important for students to work closely with their local credential advisor to understand and educate themselves on the specifics of their particular credentialing requirements.

### **Credential Candidate Placement File Service**

When requested, the School of Education provides a placement file service for credential candidates. A placement file contains a standardized resume form, two student teacher evaluations, and three letters of recommendation. Placement files are prepared and sent to school districts upon written authorization from the student.

## State of California Requirements for Multiple and Single Subject Teacher Credential Programs

All students beginning a teaching credential program after July 1, 2008 will be required to pass Teacher Performance Assessments (TPA) prepared by the California Commission on Teacher Credentialing. Each completed assessment is sent to a trained assessor to be scored. A student must pass all four assessments in order to be recommended for a credential. If a student does not receive a passing score on an assessment the student can retake it.

In California, the multiple subject credential authorizes the holder to teach in a self-contained classroom, typically in grades K-8. The single subject credential authorizes the holder to teach in a departmentalized situation, typically at the junior high or high school level. The SB2042 multiple subject credential and the single subject credential carry with them an authorization to teach English Language Learners both in the general education classroom and in designated classes.

### **Student Teaching Requirements**

### Applicable to all Multiple Subject and Single Subject Credentials

Before beginning any part of student teaching, candidates must:

- Return the completed credentials packet within 30 days of credential orientation.
- Provide proof of possession of a Certificate of Clearance or equivalent document.
- Provide proof of passage of the Basic Skills Requirement.
- Provide proof of meeting the subject matter competency requirement. Single subject teacher candidates may meet subject matter either by passing the appropriate Commission-approved examinations or by obtaining a complete subject matter equivalency letter from a regionally accredited CTC-approved program verifying completion of the appropriate subject matter program. Multiple subject teacher candidates must demonstrate subject matter competency by passing a Commission-approved examination, currently the California Subject Examination for Teachers: Multiple Subjects (CSET).
- Provide verification of a negative tuberculin examination taken within the last four years.
- Complete the TED coursework with a 3.0 GPA; "D" and "F" grades are not accepted
- · Complete the undergraduate residency requirement
- Have a zero account balance.
- Screening Interview with a School of Education faculty member
- Attend student teaching orientation

Please see a credential advisor or placement specialist for specific information regarding any of these requirements.

### **Multiple and Single Subject Student Teaching Placements**

Candidates are placed in their student teaching assignment by the University. Students should not contact districts directly to obtain student teaching placement.

Detailed requirements for student teaching are listed in the Student Teaching Handbook for Multiple Subject/Single Subject.

Candidates will be placed:

- By the University in their student teaching school under the supervision of a University Supervisor and Supervising Teacher(s).
- In a supervised full-time student teaching assignment within the appropriate credential area for one full academic semester.
- For at least one-half of their student teaching, in approved public, charter, or private schools that implement state adopted core curriculum content standards within the state of California. Summer school, after-school programs, and outdoor education programs will be reviewed to determine if they meet criteria for a student teaching assignment. Court schools or community alternative schools may be acceptable placements for one-half of the student teaching experience.
- In two different teaching settings. BCLAD candidates must be in classrooms that provide literacy and academic content taught in the language of emphasis for at least one extended teaching assignment.
- In two different grade spans.

### Multiple Subject Candidates will be placed:

• In classrooms to observe and participate at two or more of the following grade spans: K-2, 3-5, and 6-9. A K-2 class experience is required unless there is documented fieldwork experience with beginning readers.

Single Subject Candidates will be placed:

- In two or more subject-specific teaching assignments that differ in content and/or grade level.
- In a teaching experience of a minimum of four academic periods a day in two classroom settings.

### COURTESY PLACEMENTS: OUT-OF-STATE REQUESTS FOR STUDENT TEACHING

Candidates interested in completing TED 465A, B, C, D Student Teaching outside of California submit a Courtesy Placement Request to the School of Education Credential Department. The State Student Teaching Program Specialist will review the candidate's eligibility requirements. The State Student Teaching Program Coordinator will interview the applicant to assess the candidate's knowledge, skills and dispositions. Successful completion of the student teaching program requirements and interview will determine the candidate's eligibility for a Courtesy Placement. Students must meet all California program and testing requirements to be eligible for a courtesy placement.

Although National University makes every effort to find courtesy placements, the university is unable to guarantee placements. Out-of state requests are difficult to arrange because other states often have specific compliance requirements. Agreements between National University, a State Teaching Credential Office, Department of Defense (outside United States) and a cooperating university must be approved before placement is considered. A signed contract must be obtained from the requested school district. These agency agreements are secured by the National University Supervisor is hired by NU and a Supervising Teacher is assigned by the district to supervise the candidate. It is not unusual for this process to take several months to complete.

In addition, some states will not allow out of state universities to place student teachers into their schools and will therefore require that the candidate enroll and pay for student teaching coursework at a local university. In these cases, the student must enroll and pay for National University student teaching coursework in addition to the local universities courses.

Upon completion of student teaching and all other credential requirements, candidates will meet the requirements for a **California Teaching Credential**. If a candidate desires a credential for another state, the candidate must contact the appropriate state agencies and meet the specific state requirements before student teaching.

Please contact your Credential Advisor or Placement Specialist if you have additional questions about this placement option.

### **Recommendation for a California Credential**

To be formally recommended for a California Preliminary Teaching Credential by National University after completion of a blended bachelor's program, students must have the following requirements:

- Completed all requirements for the blended bachelor's degree. (Completion must be verified by the Registrar's office.)
- Successful completion of the teacher education program coursework within seven years.
- Proof of passing with grade of "C" or better coursework or an examination covering the U.S. Constitution
- Proof of passage of the Basic Skills Requirement.
- Proof of meeting the subject matter competency requirement. Single subject teacher candidates may meet subject matter either by passing the appropriate Commission-approved examinations or by obtaining a complete subject matter equivalency letter from a regionally accredited CTC-approved program verifying completion of the appropriate subject matter program. Multiple subject teacher candidates must demonstrate subject matter competency by passing a Commission-approved examination, currently the California Subject Examination for Teachers: Multiple Subjects (CSET).
- Completion of the undergraduate residency requirement for the blended bachelor's program.
- Successful completion of the coursework with a minimum grade point average of 3.0 for TED coursework. (Grades of "D" and "F" are not accepted.) All coursework must be completed within seven years to be accepted.
- A minimum of a 2.5 GPA overall for bachelor's degree.
- Successful completion of the exit process, including portfolio requirements.
- Proof of passing the Reading Instruction Competence Assessment (RICA). (Initial Multiple Subject teacher candidates only)
- CPR certification for Infant, Child, and Adult (must be valid when candidate applies for teaching credential)
- Valid certificate of clearance or equivalent document.
- Fulfillment of all financial obligations to the University before applying for the credential; zero account balance.
- A completed CTC credential application with valid credit card to pay for CTC online application fee.

### CREDENTIAL PROGRAMS: POST BACCALAUREATE INFORMATION

Certain credential programs may require enrollment into an electronic portfolio. Please see your credential advisor for further information.

### **Admission Requirements**

Students seeking a California Credential at National University must possess a conferred or completed bachelor's degree, with a minimum 2.5 GPA from a regionally accredited U.S. university. Students with international degrees who do not hold a U.S.approved bachelor's degree must receive an evaluation from a CTCapproved international evaluation agency before being admitted to the University and starting the first course.

#### Admission Process

In addition to the admission requirements listed in the "General Admission Procedures" section of this catalog, applicants to all of National University's credential programs must proceed through the following admissions procedure:

**Stage 1:** Students meet with an admission advisor and complete an admissions packet. Students who meet the listed criteria are admitted on a "provisional" basis with an estimated program of study.

Graduate students see "Graduate Admission Standards."

**Stage 2:** All credential students must attend a Faculty/Credential Advisement orientation and complete a candidate statement within 30 days of starting their first course or prerequisite course. The candidate statement must be reviewed and signed by the faculty advisor for admission to the School of Education.

**Stage 3:** Students must complete the credential packet and return this to the credential advisor within 30 days to avoid evaluation or scheduling delays. Candidates enrolled in both master's degree and credential programs are evaluated after the credential packet is returned to the credential advisor.

Students transferring from a teacher education program at another university must provide a letter of good standing. A maximum of 13.5 quarter units may be accepted for unit credit and/or course content.

### **Credential Residency Requirements**

Candidates must complete a minimum of 31.5 quarter units in residence at National University to be recommended for a credential to the California Commission on Teacher Credentialing. Courses taken online are considered to be in-residence.

The residency requirement does not apply to candidates in the following programs:

CLAD Certificate Level II Special Education California Reading Certificate Early Childhood Special Education Certificate Professional (Tier II) Administrative Services Credential

An additional credential if one is previously held

All credential programs must be completed with a GPA of 3.0 ("D" and "F" grades are not accepted).

Students who are absent for a period of 12 months or more must reenroll and be re-evaluated under a new catalog. All credential courses are valid for seven years.

### The Student Agreement

To ensure that graduates of National University's teaching and services credential programs are able to meet the legal requirements of the California Commission on Teacher Credentialing (CTC), all applicants for admission to education credential programs must enter into a student agreement. A copy of the student agreement is contained in the credential information packet that is available from a credential advisor in the advisement orientation meeting. The student agreement gives National University the right to suspend or terminate the student's participation in the credential program upon a showing that the student has:

- committed acts or engaged in conduct that could constitute grounds for denial of a credential;
- failed to demonstrate the requisite skills and qualifications to satisfy the requirements for a credential; or
- demonstrated other qualities or behaviors enumerated in the student agreement inconsistent with National University's recommendation of the student for an education credential. The student agreement also authorizes National University to release to the Commission all pertinent information pertaining to the student's qualification or fitness for a credential.

### Student Assistance, Notice of Need to Improve, and Dismissal from School of Education Programs

National University is committed to maintaining quality standards throughout its credential and master's programs and to graduating competent professional educators. As required by the California Commission on Teacher Credentialing (CTC), National University identifies and assists students who need special assistance, and retains in its programs only those students who are suited for entry to or advancement in the education profession. The CTC is charged by the state with evaluating the moral character and fitness of all persons who wish to teach or perform certified services in California public schools. Every person who is an applicant for, or who now holds, any credential, certificate, permit, or license authorizing service in California public schools is answerable to the CTC and the Committee on Credentials for his or her fitness-related conduct. California's Laws and Rules Pertaining to the Discipline of Professional Certificated Personnel (2002), available on the CTC website at www.ctc.ca.gov, address legal, ethical, and behavioral standards to which all such persons must adhere.

If a student is identified as being deficient or needing assistance to meet program standards at any point during his or her program, the student's instructor of record during coursework or University supervisor during a fieldwork assignment will issue the student a Professional Growth and Development Plan. The plan will indicate one of three possible actions that the instructor/supervisor intends to recommend to the lead faculty in the program:

- The student is identified as needing improvement in designated areas. A plan of improvement, with an expected date of completion, is attached to the form. The student will be permitted to continue taking classes or continue in his/her fieldwork assignment while completing the plan.
- 2. The student is identified as needing improvement in designated areas. A plan of improvement, with an expected date of completion, is attached to the form. The student receives a failing grade in the class or an unsatisfactory grade in the fieldwork assignment. The student will not be permitted to continue taking classes or continue in his/her fieldwork assignment until the plan is completed and the class or fieldwork assignment is re-taken, at the student's expense.
- The student is identified as being unsuited for the education profession and is recommended for dismissal from the program.

Upon receiving a Professional Growth and Development Plan, the student will meet with his/her instructor of record or University supervisor, along with the regional lead faculty and/or the lead supervisor. This faculty assistance team will discuss any recommended plan of improvement with the student and will later meet with the student to evaluate the student's performance of the expectations listed on the plan.

If the candidate is allowed to continue in the program and receives a second unsatisfactory grade in a practicum or student teaching assignment, the student will be recommended for dismissal from the program. The process for a hearing and appeal, upon recommendation for dismissal from a program, is outlined in the Policies and Procedures section of this catalog.

### Program Advisement

Every credential program has an assigned faculty advisor who is

available to provide program specific advisement related to a specific program field. The faculty advisor name and contact information is listed in the catalog under the heading of specific programs. These advisors are a resource for specific questions students may have about classes, curriculum, and instructors. Each student also has a credential advisor available to them to help navigate the specifics of the California state credentialing requirements. These requirements can vary and are in constant flux due to changing legislation and the dynamic nature of public education. It is very important for students to work closely with their local credential advisor to understand and educate themselves on the specifics of their particular credentialing requirements.

### **Credential Candidate Placement File Service**

When requested, the School of Education provides a placement file service for credential candidates. A placement file contains a standardized resume form, two student teacher evaluations and three letters of recommendation. Placement files are prepared and sent to school districts upon written authorization from the student.

### State of California Requirements for Multiple and Single Subject Teacher Credential Programs

All students beginning a teaching credential program after July 1, 2008 will be required to pass Teacher Performance Assessments (TPA) prepared by the California Commission on Teacher Credentialing. Each completed assessment is sent to a trained assessor to be scored. A student must pass all four assessments in order to be recommended for a credential. If a student does not receive a passing score on an assessment the student can retake it.

In California, the multiple subject credential authorizes the holder to teach in a self-contained classroom, typically in grades K-8. The single subject credential authorizes the holder to teach in a departmentalized situation, typically at the junior high or high school level. The SB2042 multiple subject credential and the single subject credential carry with them an authorization to teach English Language Learners both in the general education classroom and in designated classes. The BCLAD credential has an added language component which authorizes teachers to teach academic subjects to English Learners in their primary language and in English.

All initial multiple subject and single subject credentials are granted as preliminary credentials under Commission SB 2042 standards.

- 1) Candidates for the multiple subject and single subject credentials who complete their teacher preparation through a Commissionapproved program in California must be recommended for the credential by their college or university. Teachers who completed their professional preparation outside of California must apply directly to the commission for their initial credentials.
- 2) Candidates with three or more years of accredited private school experience may be able to waive student teaching under SB 57. See a credential advisor for details or obtain information on the CTC website at www.ctc.ca.gov.
- 3) Candidates with six or more years of accredited private school experience may apply directly to the California Commission on Teacher Credentialing (CTC) under SB 57 by submitting application form 41-4, fingerprint clearance materials, transcripts, other requested materials and current applicable fees. See CTC website at www.ctc.ca.gov/credentialinfo/credinfo.html or call (888) 921-2682 (toll free).

### **Student Teaching Requirements**

### Applicable to all Multiple Subject and Single Subject Credentials and Education Specialist Credentials

Before beginning any part of student teaching, candidates must:

Return the completed credentials packet within 30 days of orientation

- Provide proof of passage of the Basic Skills Requirement
- Provide proof of meeting the subject matter competency requirement. Single subject teacher candidates may meet subject matter either by passing the appropriate Commission-approved examinations or by obtaining a complete subject matter equivalency letter from a regionally accredited CTC-approved program verifying completion of the appropriate subject matter program. Multiple subject teacher candidates who enroll in a teacher preparation program on or after July 1, 2004, must demonstrate subject matter competency by passing a Commission-approved examination, currently the California Subject Examination for Teachers: Multiple Subjects (CSET).
- Provide proof of possession of a Certificate of Clearance or equivalent document.
- Provide verification of a negative tuberculin examination taken within the last four years.
- Complete the prerequisite coursework with a 3.0 GPA; "D" and "F" grades are not accepted
- Complete a minimum of 31.5 quarter units in residence.
- Have a zero account balance.
- Screening Interview with a School of Education faculty member.
- Attend student teaching orientation.
  BCLAD only verification of passing scores on oral and written
- bCLAD only vertication of passing scores on oral and written language proficiency examinations.

Please see a credential advisor or placement specialist for specific information regarding any of these requirements.

### **Multiple and Single Subject Student Teaching Placements**

Candidates are placed in their student teaching assignment by the University.

Detailed requirements for student teaching are listed in the Student Teaching Handbook for Multiple Subject/Single Subject or Special Education Handbook and in the NU1 for Teacher Education and EXC 602A for Special Education credential packets.

Note: Teacher Education candidates may apply for a review of possible equivalency (see form in Student Teaching Handbook) of one half of this requirement if they can document appropriate experience and meet other specified criteria. Special Education student teaching is nine weeks. No equivalency is granted for Special Education student teaching.

Candidates will be placed: Multiple or Single Subject

- By the University in their student teaching school under the supervision of a University Supervisor and Supervising Teacher(s).
- In a supervised full-time student teaching assignment within the appropriate credential area for one full academic semester.
- For at least one-half of their student teaching, in approved public, charter, or private schools that implement state adopted core curriculum content standards within the state of California. Summer school, after-school programs, and outdoor education programs will be reviewed to determine if they meet criteria for a student teaching assignment. Court schools or community alternative schools may be acceptable placements for one-half of the student teaching experience.
- In two different teaching settings. BCLAD candidates must be in classrooms that provide literacy and academic content taught in the language of emphasis for at least one extended teaching assignment.
- In two different grade spans.

Multiple Subject Candidates will be placed:

 In classrooms to observe and participate at two or more of the following grade spans: K-2, 3-5, and 6-9. A K-2 class experience is required unless there is documented fieldwork experience with beginning readers.

Single Subject Candidates will be placed:

- In two or more subject-specific teaching assignments that differ in content and/or grade level.
- In a teaching experience of a minimum of four academic periods a day in two classroom settings.

### COURTESY PLACEMENTS: OUT OF STATE REQUESTS FOR STUDENT TEACHING

Candidates interested in completing TED 630A, B, C, D Student Teaching outside of California submit a Courtesy Placement Request to the School of Education Credential Department. The State Student Teaching Program Specialist will review the candidate's eligibility requirements. The State Student Teaching Program Coordinator will interview the applicant to assess the candidate's knowledge, skills and dispositions. Successful completion of the student teaching program requirements and interview will determine the candidate's eligibility for a Courtesy Placement. Students must meet all California program and testing requirements to be eligible for a courtesy placement.

Although National University makes every effort to find courtesy placements, NU is unable to guarantee placements. Out-of state request are difficult to arrange because other states often have specific compliance requirements. Agreements between National University, a State Teaching Credential Office, Department of Defense (outside United States) and a cooperating university must be approved before placement is considered. A signed contract must be obtained from the requested school district. These agency agreements are secured by the National University Supervisor is hired by NU and a Supervising Teacher is assigned by the district to supervise the candidate. It is not unusual for this process to take several months to complete.

In addition, some states will not allow out of state universities to place student teachers into their schools and will therefore require that the candidate enroll and pay for student teaching coursework at a local university. In these cases, the student must enroll and pay for National University student teaching coursework in addition to the local universities courses.

Upon completion of student teaching and all other credential requirements, candidates will meet the requirements for a **California Teaching Credential**. If a candidate desires a credential for another state, the candidate must contact the appropriate state agencies and meet the specific state requirements before student teaching.

### **Credential Candidates Teaching Under Contract**

National University provides a program whereby actively employed teachers can complete the requirements for their teaching credential while employed. All of the student teaching may be conducted in the candidate's classroom, assuming that the contract position is a match for the credential sought. Credential candidates teaching under contract:

- In an approved multiple subject assignment can complete the assignment in their own classroom. There must be documented experience with K-2 or beginning readers, otherwise candidates must complete four weeks in an alternate setting with a certified teacher.
- In an approved single subject assignment (within the credential area) can complete the full semester in their own assignment provided that they are teaching four periods in two grade levels, or can document prior experience at other grade levels otherwise candidates must complete four weeks in an alternate setting with a certified teacher
- In a regionally (WASC) approved nonpublic school setting must complete a minimum of one course of the four-course sequence student teaching experience in a public school.
- Teach under the supervision of a University Supervisor and Supervising Teacher who model effective teaching, implement state-adopted academic core curriculum, mentor the candidate, and work with the University Supervisor.

### **Recommendation for a California Credential**

Students must have:

- Proof of a conferred bachelor's degree from a regionally accredited institution of higher education (IHE) or an international degree of U.S. equivalence
- Successful completion of the National University admission process
- Successful completion of the teacher education program within seven years.
- Proof of passing with grade of "C" or better coursework or an examination covering the U.S. Constitution
- Official transcripts from all colleges/universities attended on file at National University
- Proof of passage of Basic Skills Requirement. Highly recommended prior to admission.
- Proof of meeting the subject matter competency requirement. Single subject teacher candidates may meet subject matter either by passing the appropriate Commission-approved examinations or by obtaining a complete subject matter equivalency letter from a regionally accredited CTC-approved program verifying completion of the appropriate subject matter program. Multiple subject teacher candidates who enroll in a teacher preparation program on or after July 1, 2004, must demonstrate subject matter competency by passing a Commission-approved examination, currently the California Subject Examination for Teachers: Multiple Subjects (CSET).
- Completion of a minimum of 31.5 TED or 36 BCLAD quarter units in residence
- Successful completion of coursework with a minimum grade point average of 3.0 for graduate coursework. (Grades of "D" and "F" are not accepted.) All coursework must be completed within seven years to be accepted.
- Successful completion of the exit process, including portfolio requirements
- Written evaluations of performance in field experiences, internships, educational projects, student teaching, and other practicum.
- Proof of passing the Reading Instruction Competence Assessment (RICA). (Initial Multiple Subject and Education Specialist teacher candidates only)
- CPR certification for Infant, Child, and Adult (must be valid when candidate applies for teaching credential)
- Valid certificate of clearance or valid equivalent document.
- BCLAD only verification of passing scores on oral and written language proficiency examinations.
- Fulfillment of all financial obligations to the University before applying for the credential; zero account balance.
- A completed CTC credential application with valid credit card to pay for the CTC online application fee.

All candidates are expected to participate in the evaluation of programs including follow-up studies after being employed in the field.

## Additional Requirements for a Clear Multiple or Single Subject Teaching Credential

Renewal requirements vary, therefore it is the candidates' responsibility to familiarize themselves with the specific renewal requirements listed on their credential so they can enroll in the appropriate university or district program.

### ■ PRELIMINARY MULTIPLE SUBJECT TEACHING CREDENTIAL PROGRAM WITH BCLAD OPTION (780-363/365)

Faculty Advisor. Alberto Sanchez (858) 642-8376 asanchez@nu.edu (15 courses; 66 quarter units TED) (16 courses; 70.5 quarter units BCLAD) A preliminary multiple subject credential is valid for a maximum of five years. During this five-year period, students must complete the induction requirements for a clear credential. The multiple subject credential enables the candidate to teach in a self-contained classroom, typically at the elementary level. Students should see "Admission to Credential Programs" for specific admission information.

### Admission Requirements

Candidates requesting to be admitted for Teacher Education must follow the steps listed under Graduate Admission in addition to the following credential specific requirements.

- Attendance at the Faculty/Credential Advisement (NU1) Orientation is mandatory to be admitted to the Teacher Education Credential Program; this must be done within 30 days of enrollment in the first teacher education course or prerequisite.
- At the NU1 Orientation students will complete a candidate statement which must be completed, reviewed, and signed by the faculty advisor for formal admission into SOE.
- At the NU1, students will receive a Credential Packet which must be completed and returned to the credential advisor within 30 days.

Note: Students must have access to Microsoft Office on either a PC or Mac platform. Since National University and the CTC regularly use e-mail to communicate with students, it is highly recommended that students do not use AOL, Earthlink, or school district e-mail addresses since these e-mails are regularly blocked from these accounts. An active Yahoo! or Hotmail account is recommended instead.

### **Highly Recommended Before Admission**

- A passing score on the Basic Skills Requirement (must be completed prior to student teaching and internships).
- Proof of having met subject matter competence requirement through a passing score on the approved state exam. Subject matter competency must be completed prior to student teaching. Multiple subject teacher candidates who enroll in a teacher preparation program on or after July 1, 2004, must demonstrate subject matter competency by passing a Commission-approved examination, currently the California Subject Examination for Teachers: Multiple Subjects (CSET). CTC policy, in compliance with the No Child Left Behind Act, prohibits colleges and universities from accepting subject matter equivalency letters for multiple subject teacher candidates who enroll into a credential program on or after July 1, 2004.
- All TED courses include a four hour field experience component that requires students to complete activities in K-12 schools. A Certificate of Clearance is necessary prior to field activities in the schools. The form to obtain a Certificate of Clearance is provided in the Credential Packet at the NU1 Orientation.

### Recommended Sequence

**Foundation and Methods** (7 courses; 31.5 quarter units TED)

(8 courses; 36 quarter units BCLAD)

- BTE 612 History and Culture of Latinos in the U.S. (taught in the language of emphasis) (BCLAD students only)
- TED 615 Foundations of Education
- TED 605 The Diverse Classroom
- TED 611 Educational Psychology
- TED621A Language Development Methods for the Elementary School
- (Prerequisites: TED 615, BTE students only: BTE 612) BTE/TED 621B Reading and Language Arts Methods for the Elementary School \*\*

Education

Science, Physical Education, Visual and Performing Arts (Prerequisites: TED 615 and TED 621A)

BTE/TED 622B Curriculum and Instruction II: Mathematics and Science

(Prerequisites: TED 615 and TED 621A)

All TED courses include a four hour field experience component which requires students to complete activities in K-12 schools.

Note: BTE courses are taught in the language of emphasis: Spanish.

\*\*Students must pass Reading Instruction Competency Assessment (RICA) before being recommended to the CTC for a Multiple Subject credential. It is recommended that candidates take this exam after completion of TED/BTE 621B.

### **Co-requisites**

(3 courses; 13.5 quarter units)

These courses can be taken at any time in their program but are recommended prior to student teaching. These courses are required prior to applying for the credential.

HED 602 Introductory Health Education: K-12

EXC 625 Exceptional Children in the Classroom

EDT 608 Computer-Based Technology in the Classroom

### Student Teaching

(5 courses; 21 quarter units)

Requirements prior to student teaching:

- Course Prerequisites: TED 615, TED 605, TED 611, TED 621A, BTE/TED 621B, BTE/TED 622A and BTE/TED 622B with a 3.0 GPA.
- Valid Certificate of Clearance or valid equivalent document.
- Grades of "D" and "F" are not accepted.
- Students must pass the Basic Skills Requirement
- Students must meet Subject Matter Competence by passing the approved subject matter exam.
- Students must have a zero account balance.
- Negative TB test.

TED 629 Student Teaching Seminar\* (3.0 quarter units)
BTE/TED 630A Beginning Student Teaching BTE/TED 630B Student Teaching (Prerequisite: BTE/TED 630A)
BTE/TED 630C Student Teaching (Prerequisite: BTE/TED 630A)
BTE/TED 630D Student Teaching (Prerequisite: BTE/TED 630A)
\* TED 629 must be taken concurrently with TED 630A-D.

Note: BTE/TED 630A,B,C, and D are field experience courses receiving a Satisfactory or Unsatisfactory grade and therefore do not factor into the student GPA. Please see "Academic Information for Graduate Degrees" for more information.

# Student teaching courses are added to the student's schedule by the Credential Department. All other courses can be added by the student and/or the admission advisor.

The Student Teaching courses are TED 629, BTE/TED 630 A-D.

### **Exit Requirements**

The following must be in student's file prior to being recommended for a credential:

- Proof of a bachelor's degree from a regionally accredited IHE with a GPA of 2.5.
- Copy of evaluation (if a non- U.S. degree) by a CTC-approved

international evaluation agency.

- Official transcripts for any transferable coursework related to credential program coursework.
- Proof of passing the U.S. Constitution exam or transcript verifying completed U.S. Constitution coursework.
- Valid Certificate of Clearance or valid equivalent document.
  Passing grade on grammar, reading and composition qualifying exam (BCLAD only).
- Passing grade on oral interview with level 3 or above (BCLAD only).
- Successful completion of the exit process, including passing portfolio review.
- Passing score on the Basic Skills Requirement.
- Passing score on the appropriate subject matter exam.
  Proof of passing the Reading Instruction Competence
- Proof of passing the Reading Instruction Competence Assessment (RICA).
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- Zero account balance prior to student teaching and completion.
- Completion of a minimum of 31.5 quarter units in residence.Completion of credential program within seven years.
- Grades "D" and "F" are not accepted.
- CPR certification for Infant, Child, and Adult (must be valid when candidate applies for teaching credential)

### ■ PRELIMINARY SINGLE SUBJECT CREDENTIAL PROGRAM WITH BCLAD OPTION

### (780-362/364)

Faculty Advisor: Alberto Sanchez • (858) 642-8376 • asanchez@nu.edu (15 courses; 66 quarter units TED) (16 courses; 70.5 quarter units BCLAD)

A preliminary single subject credential is valid for a maximum of five years. During this five-year period, students must complete the induction requirements for a clear credential. The single subject credential enables the candidate to teach in a departmentalized situation, typically at the secondary level. Students should see "Admission to Credential Programs" for specific admission information.

### Admission Requirements

Candidates requesting to be admitted for Teacher Education must follow the steps listed under Graduate Admission in addition to the following credential specific requirements.

- Attendance at the Faculty/Credential Advisement (NU1) Orientation is mandatory to be admitted to the Teacher Education Credential Program; this must be done within 30 days of enrollment in the first teacher education course or prerequisite.
- At the NU1 Orientation students will complete a candidate statement which must be completed, reviewed, and signed by the faculty advisor for formal admission into SOE.
- At the NU1, students will receive a Credential Packet which must be completed and returned to the Credential Advisor within 30 days.

Note: Students must have access to Microsoft Office on either a PC or Mac platform. Since National University and the CTC regularly use e-mail to communicate with students, it is highly recommended that students do not use AOL, Earthlink or school district e-mail addresses since these e-mails are regularly blocked from these accounts. An active Yahoo! or Hotmail account is recommended instead.

### **Highly Recommended Before Admission**

- A passing score on the Basic Skills Requirement (must be completed prior to student teaching and internships).
- Proof of having met specific subject matter competence requirement through a passing score on the approved state exam, currently the CSET or obtaining a complete subject matter

equivalency letter from a regionally accredited CTC-approved program verifying completion of the appropriate subject matter program. Subject matter competence must be completed prior to student teaching.

 All TED courses include a four hour field experience component that requires students to complete activities in K-12 schools. A Certificate of Clearance is necessary prior to field activities in the schools. The form to obtain a Certificate of Clearance is provided in the Credential Packet at the NU1 Orientation.

### **RECOMMENDED SEQUENCE**

#### Foundation and Methods

(7 courses; 31.5 quarter units TED) (8 courses; 36 quarter units BCLAD)

| BTE 612 | History and Culture of Latinos in the U.S. (taught in the |
|---------|---|
|         | language of emphasis) (BCLAD students only)               |
| TED 615 | Foundations of Education                                  |

- TED 605 The Diverse Classroom
- TED 611 Educational Psychology
- TED 623 Language Development Methods for Secondary and Middle Schools
  - (Prerequisite: TED 615)
- BTE/TED 625A Curriculum and Development for Secondary and Middle Schools (Prerequisites: TED 615 and TED 623)
- BTE/TED 625B Instruction and Classroom Management for Secondary and Middle Schools (Prerequisites: TED 615, TED 623 and TED 625A)
- BTE/TED 624 Content Area Literacy for Secondary and Middle Schools

(Prerequisites: TED 615 and TED 623)

All TED courses include a four hour field experience component which requires students to complete activities in K-12 schools.

Note: BTE courses are taught in the language of emphasis: Spanish.

#### **Co-requisites**

(3 courses; 13.5 quarter units)These courses can be taken at any time in their program but are recommended prior to student teaching. These courses are required prior to applying for the credential.

- HED 602 Introductory Health Education: K-12
- EXC 625 Exceptional Children in the Classroom
- EDT 608 Computer-Based Technology in the Classroom

#### Student Teaching

(5 courses; 21 quarter units)

Requirements prior to student teaching:

- Prerequisites: TED 615, TED 605, TED 611, TED 623, BTE/TED 625A, BTE/TED 625A and BTE/TED 624 with a 3.0 GPA).
- Valid Certificate of Clearance or valid equivalent document.
- Grades of "D" and "F" are not accepted.
- Students must pass the Basic Skills Requirement
- Student must meet Subject Matter Competence by passing the approved subject matter exam or have a letter of completion from an approved California subject matter program.
- Students must have a zero account balance.
- Negative TB test.

TED 629\*Student Teaching Seminar (3.0 quarter units)BTE/TED 630ABeginning Student TeachingBTE/TED 630BStudent Teaching(Prerequisite: BTE/TED 630A)BTE/TED 630CStudent Teaching(Prerequisite: BTE/TED 630A)BTE/TED 630DStudent Teaching(Prerequisite: BTE/TED 630A)BTE/TED 630DStudent Teaching(Prerequisite: BTE/TED 630A)

## School of Education

\*TED 629 is taken concurrently with TED 630A-D.

Note: BTE/TED630A,B,C and D are field experience courses receiving a Satisfactory or Unsatisfactory grade and therefore do not factor into the student GPA. Please see "Academic Information for Graduate Degrees and Credentials" for more information.

# Student teaching courses are added to the student's schedule by the Credential Department. All other courses can be added by the student and/or the admission advisor.

The Student Teaching courses are TED 629, BTE/TED 630 A-D.

#### **Exit Requirements**

The following must be in student's file prior to being recommended for a credential:

- Proof of a bachelor's degree from a regionally accredited IHE with a GPA of 2.5.
- Copy of evaluation (if a non- U.S. degree) by a CTC-approved international evaluation agency.
- Official transcripts for any transferable coursework related to credential program coursework.
  - Proof of passing the U.S. Constitution exam or transcript verifying completed U.S. Constitution coursework.
- Valid Certificate of Clearance or valid equivalent document.Passing grade on grammar, reading, and composition qualifying
- exam (BCLAD only).
- Passing grade on oral interview with level 3 or above (BCLAD only).
- Successful completion of the exit process, including passing portfolio review.
- Passing grade on the Basic Skills Requirement.
- Passing grade on the appropriate subject matter exam or equivalency letter from a regionally accredited CTC-approved program verifying completion of the appropriate subject matter program.
- Zero account balance prior to student teaching and completion.
- Completion of a minimum of 31.5 quarter units in residence.
- Completion of credential program within seven years.
- Grades "D" and "F" are not accepted.
- CPR certification for Infant, Child, and Adult (must be valid when candidate applies for teaching credential)

### ■ UNIVERSITY INTERNSHIP CREDENTIAL PROGRAM FOR MULTIPLE SUBJECT/SINGLE SUBJECT TEACHING (781)

(13 courses; 57 quarter units)

University Internship credential programs provide opportunities for students to assume the responsibilities of full-time "teachers of record" while completing the credential coursework required for a preliminary credential. Interns are salaried credentialed employees of a school or agency and must have an offer of employment from an approved school district or agency that has or is willing to enter into a partnership agreement with National University. University Internship credential students meet the requirements of *No Child Left Behind* (NCLB).

National University students who are interested in becoming a university intern must complete and show verification of all prerequisite requirements and go through the internship eligibility process to determine suitability for the internship program.

An Internship Credential is valid for two years at the site of hire. As such, a university intern must be continuously enrolled in coursework, maintain an updated account balance, and register their internship status on a yearly basis with the Commission on Teacher Credentialing (CTC). Any changes in employment status while on an internship credential must be communicated to the Credential Advisor.

### Internship Credential Prerequisite and Eligibility Requirements

### Prerequisites:

- · Possess a baccalaureate degree from a regionally accredited college or university
- Enrollment into a National University single/multiple subject credential program.
- Proof of subject matter competence.
- Proof of passing with a grade "C " or better coursework or an examination covering the U.S. Constitution.
- · Provide proof of possession of a CTC document verifying fingerprint clearance.
- A negative result on a tuberculosis (TB) test taken within the last four years.
- Current account balance.
- 3.0 GPA.
- Resume.
- A signed Acknowledgement of Terms and Agreements for an Internship Credential form (CP-1).
- Verification of completion of the 120 clock hours of required preservice coursework/field experience detailed below:

### **Eligibility Requirements**

In addition to completion of all prerequisites, students are required to verify completion of the following Intern Eligibility forms:

- 1. Verification of a partnership agreement between National University and the intern's potential employer.
- 2. District or agency offer of employment for the intern as a full time teacher of record in a setting appropriate for the credential being sought.
- 3. Faculty verification of intern eligibility determined in an interview with a lead internship faculty member.

### Internship Program Course Sequence

### **Pre-Service Coursework and Field Experience Requirements**

The CTC mandates that all approved internship programs require a minimum of 120 hours of pre-service coursework (13.5 quarter units) or a combination of coursework and documented field experience/ observation/exposure. The pre-service requirement must be met in advance of beginning an internship and functioning as a "teacher of record."

(Note: 4.5 quarter units are equal to 40 clock hours). (MS= Multiple Subject and SS= Single Subject)

| TED 605 The Diverse Classroom (MS | /SS) |
|-----------------------------------|------|
|-----------------------------------|------|

| TED 621A | Language Development Methods in Elementary School |
|----------|---|
|          | (MS)  |
| or       |   |

**TED 623** Language Development Methods for Secondary and Middle Schools (SS) and

An additional 4.5 quarter unit's coursework or 40 clock hours of field experience/observations. This experience does not waive any coursework in the program.

### **Internship Specific Course Requirements**

An internship credential is required before enrollment into the following three courses. These courses provide initial and ongoing support and training that internship candidates require. TED 629I and TED628I are eight month long courses intended to support the eight month long internship coaching cycle. Students must also attend and participate in school district's regular workshops and collaborative monthly meetings with intern and both support supervisors (site and university).

| TED 629I | Intern Teaching Seminar (MS/SS)      |
|----------|--------------------------------------|
| TED 628I | Internship Clinical Practice (MS/SS) |

### Preliminary Teaching Coursework Sequence for Interns

| TED 621B | Reading and Language Arts Methods for Elementary Schools (MS)                                 |
|----------|---|
| or       |   |
| TED 624  | Reading and Language Arts Methods for Secondary and<br>Middle Schools (SS)                    |
| TED 611  | Educational Psychology (MS/SS)  |
| TED 622A | Curriculum and Instruction I: History, Social Science, PE,<br>Visual and Performing Arts (MS) |
| or       |   |
| TED 625A | Curriculum and Development for Secondary and Middle Schools (SS)                              |
| EDT 608  | Computer-Based Technology in the Classroom (MS/SS)  |
| TED 622B | Curriculum and Instruction: Mathematics and Science (MS)                                      |
| or       |   |
| TED 625B | Instruction and Classroom Management for Secondary and Middle Schools (SS)                    |
| TED 615  | Educational Foundations (MS/SS)   |
| HED 602  | Introductory Health Education: K-12 (MS/SS)   |
| EXC 625  | Exceptional Children in the Classroom (MS/SS)   |

### PROFESSIONAL CLEAR CREDENTIAL FOR HOLDERS OF A RYAN CREDENTIAL WITH **CLAD AND AB 1059**

(751)

(4 courses; 18 quarter units)

Holders of a Ryan Credential issued after January 1, 1999 may complete one of the following options to qualify for the professional clear credential:

- 1) A Commission accredited SB 2042 Professional Teacher Induction program, if available, and the CPR component of the health education requirement if it was not already completed for the preliminary credential
- or
- 2) District BTSA Program and Health, including appropriate CPR certification, Special Education, Computer Requirements (if not completed for preliminary- plus Advanced Computer Education.)
- HED 602 Introductory Health Education: K-12
- EXC 625 Exceptional Children in the Classroom
- EDT 608 Computer-Based Technology in the Classroom (Level 1 Technology Requirement)
- EDT 655 Issues and Trends in Educational Technology (Level II Technology Requirement)\*

3) Fifth Year of Study (may be completed prior to the issuance of the Preliminary MS/SS Teaching Credential.)\*\* and

(Health, including appropriate CPR certification, Special Education, Computer Education, if not completed for preliminary plus Advanced Computer Education)

- HED 602 Introductory Health Education: K-12
- EXC 625 Exceptional Children in the Classroom
- EDT 608 Computer-Based Technology in the Classroom (Level 1 Technology Requirement)
- EDT 655 Issues and Trends in Educational Technology (Level II Technology Requirement)\*

\* Candidates who earned a Preliminary Credential prior to July 1, 2002, are not required to fulfill the Level II technology requirement.

TED 610 Best Internship Practices (MS/SS)

or

### ■ PROFESSIONAL CLEAR CREDENTIAL FOR HOLDERS OF A PRELIMINARY 2042 MS/SS TEACHING CREDENTIAL

(4 courses; 18 quarter units )

Holders of an SB2042 credential issues after August 30, 2004 must complete a commission accredited district teacher induction program. If students' school districts do not offer a teacher induction program they must complete a CL-855 form prior to enrolling in the following courses.

Note: If students possess a SB2042 credential that was not taken postbaccalaureate, an additional 27 quarter units in a defined field of study designed to improve the teachers competence and skills is required for completion of the fifth year of study.

HED 620Coordinated School Health ProgramsEXC 604Exceptionality and Diversity in the ClassroomEDT 655Issues and Trends in Educational Technology\*MAT 650Teaching English Language Learners

### ■ PROFESSIONAL CLEAR CREDENTIAL FOR HOLDERS OF AN OUT OF STATE TEACHING CREDENTIAL (748)

Under three years of experience – see information for Ryan Credential holders

- Three to four years of experience BTSA OR approved SB 2042 Professional Teacher Induction program
- Five years or more of teaching experience 150 clock hours aligned with the CSTP
- Plus any additional requirements listed on their document including but not limited to U.S. Constitution, teaching of reading, subject-matter competence, and Basic Skills Requirements

\*\* Fifth Year of Study: Master's degree or coursework consisting of 45 quarter units beyond the baccalaureate degree completed at a regionally accredited IHE in a defined field of study designed to improve the teacher's competence and skills. (This may be completed prior to the issuance of the Preliminary MS/SS Teaching Credential.)

This fifth year course of study must be accredited by a California teacher preparation institution and may be used for one or more of the following purposes:

- Additional subject-matter preparation, including, but not limited to, pursuit of a master's or higher degree
- Completion of an accredited program for an advanced or specialized credential
- In-service training for which college or university credit is given
- Study undertaken to complete an accredited program of professional preparation
- All courses must be completed with a grade of "C" or better.
- Students must maintain a cumulative GPA of 3.0.

### ■ PRELIMINARY TIER I ADMINISTRATIVE SERVICES CERTIFICATE/CREDENTIAL

(780-000-752)

(10 courses; 45 quarter units)

This program is designed for students who are committed to improving education and who want to advance their careers by becoming public school administrators.

### Scheduling

All courses, with the exception of field experience EDA 620B, are scheduled by an advisor. (The field experience coursework, EDA 620B, is scheduled by a placement specialist once students submit a completed credential packet and after approval by a designated full-time or associate faculty member.) Students must submit a completed credential packet within 30 days of attending a credential orientation meeting.

### **Admission Requirements**

- Formal application to the University and to the Credentials Department. See "Admission to Credential Programs."
- A bachelor's degree from a regionally accredited institution or a complete evaluation from a CTC-approved international evaluation agency
- Possession of a valid preliminary, professional clear, life, general, or service credential. A day to day or short term teaching permit does not qualify as an accepted credential for admission.
- Meet all requirements for admission to credential program, including attendance at mandatory Faculty/Credential (NU3) Advisement orientation.
- Complete a candidate statement to be reviewed and signed by faculty advisor for admission to the School of Education.
- Appointment with credential advisor within 30 days of admission to return packet and to be cleared for EDA 620B. EDA 620B is administered by local faculty members and must be completed in residence.
- An overall grade point average of 2.5 in previous graduate work.
- Passing of Basic Skills Requirement verified or proof of test to be taken at next available date
- In order to avoid evaluation or scheduling errors, students must meet with a credential advisor within 30 days of enrollment.

### **Completion Requirements**

- Minimum of three years of successful, full-time experience in public schools, non-public schools or private schools of equivalent status, while in possession of one of the following:
  - A valid California teaching credential requiring a bachelor's degree and a program of professional preparation, including student teaching.
  - A valid California Designated Subjects Teaching Credential provided the applicant also possesses a bachelor's degree
  - A valid California services credential in Pupil Personnel Services, Health Services, Library Media Teacher Services, or Clinical or Rehabilitative Services requiring a bachelor's degree and a program of professional preparation, including field practice or the equivalent
    - Day-to-day or other short-term substitute experiences are not acceptable.

Note: Evidence of successful experience is required and is generally demonstrated in the form of performance evaluations.

- · Completion of approved program coursework and requirements
- A passing score on the Basic Skills Requirement
- A minimum grade point average of 3.0. Grades of "D" and "F" are not accepted
- Verification of meeting the requirement of EXC625 or equivalent course of study
- Completion of a minimum of 31.5 quarter units in residence
- Field experience, EDA620B, must be completed in residence
- Successful completion of final exit exam and exit process
- Zero account balance

### Tier I Learning Outcome/Program Goals, Modified

Upon completion of the program, students will:

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- Possess the necessary skills to become successful practicing school administrators
- Demonstrate their knowledge of practice related to curriculum standards and accountability leading to the improvement of teaching and learning
- Possess the technological background for making data driven decisions leading to instructional improvement
- Have developed an ethical framework for effective educational leadership
- Demonstrate through practice a sensitivity to and an understanding of cultural diversity and its significance in building effective school communities
- Possess the legal, financial, and human resources knowledge necessary for leading and managing schools

### **Program Prerequisite**

(1 course; 4.5 quarter units)

EXC 625 Exceptional Children in the Classroom\*

\*Note: EXC 625 may be met with experience working with students with disabilities in a less-restricted environment. Waiver requires faculty review and approval of experience.

### **Core Requirements**

(9 courses; 40.5 quarter units)

Students must complete all coursework with a GPA of 3.0 within seven years. Grades of "D" and "F" are not accepted.

| EDA 623 | Curriculum Alignment, Assessment, and Accountability |
|---------|--|
| EDA 624 | Supervision and Evaluation of Instruction            |

- EDA 625 Technology and Data Analysis for Effective Instruction
- EDA 614 Educational leadership in Schools Today
- EDA 626 Human Resources in Diverse School Communities
- EDA 618 Legal and Ethical Foundations of Education
- EDA 619 Financial Leadership and Management
- EDA 620B Field Experience in Educational Administration\*
- EDA 628 Seminar in Educational Leadership and Management\*\*

\* (May be taken concurrently with another class or scheduled in an open month. This course takes 3-12 months to complete. It must be completed within 12 months of the course being scheduled. Students must complete three courses in the credential sequence – EDA 623, EDA 624, EDA 625, EDA 614, EDA 626, EDA 618, EDA 619 – before taking this course. The course must be completed in residence.)

\*\* (At least two other credential courses, not including EDA 620B, must be completed before taking the course.)

Students can earn the preliminary administrative services certificate as part of the Master of Science in Educational Administration.

### **Exit Requirements**

- Verification of passing Basic Skills Requirement and meeting mainstreaming requirements
- Verification of three years of experience as a credentialed person in schools
- Copy of valid teaching or services credential with at least 12 months remaining before expiration
- Exit interview with credential advisor to obtain and submit necessary application (must have valid credit card to pay for CTC online application fee.)
- Exit exam
- Zero account balance

### Certificate/Credential

Students are issued a Certificate of Eligibility upon completion of the program. The certificate is required for entry-level administrative positions and before the student is eligible to pursue the professional administrative services credential unless student provides a

completed "Verification of Employment as an Administrator" (CL-777) form with the credential application, in which case the candidate will be recommended for the credential.

### INTERNSHIP – PRELIMINARY ADMINISTRATIVE SERVICES CREDENTIAL – TIER I

(781-000-752)

The preliminary administrative services intern credential program allows students who meet the admissions requirements to begin service as an administrator in their sponsoring district while completing their formal coursework preparation. Students who qualify for admission may begin the program upon starting an administrative position, either at the beginning of their program or while currently enrolled in the regular preliminary administrative services credential program. Intern students participate in the standard coursework with intern addenda and complete an alternative field work experience directly related to their administrative responsibilities.

### State of California Requirements

- Passage of the Basic Skills Requirement
- Possession of a bachelor's degree from a regionally accredited college or university
- Possession of a valid preliminary, professional clear, life, general, or service credential. An emergency permit does not qualify as an accepted credential for admission.
- Three years of experience while in the possession of a valid California emergency permit and/or teaching credential issued under the laws, rules, and regulations in effect on or before December 31, 1971, requiring the possession of a baccalaureate degree. Two years experience may be accepted with an emergency teaching permit.
- One year experience must be verified while holding a valid credential. Substitute teaching does not qualify for full-time experience.
- or \_\_\_\_
- Three years of experience appropriate to the possession of a services credential with a specialization, while holding the appropriate credential for the entire three years.
- Verification of support from the intern candidate's sponsoring district, including verification of a willingness to enter into an intern partnership with National University and a signed Memorandum of Partnership between the sponsoring district and the University. This ensures that the intern will be provided the services of a site mentor and that relevant stipulations of Education Code and Commission on Teacher Credentialing regulations are followed.

### Admissions Requirements

- All candidates for the intern program must have a GPA of 2.5 in their previous graduate work.
- All candidates must furnish three letters of recommendation from their district discussing their prospects for success in the program. One of the letters must be from their superintendent or the superintendent's designee pledging district support of the candidate.
- The candidate must submit a letter of application stating his or her qualifications for admission to the intern program, why he or she wants to enter the intern program, and his or her philosophy of education.
- The candidate must participate in an in-depth interview assessing his or her prospects for success in meeting his or her administrative responsibilities. The interviewers will be a University faculty member and a representative of the candidate's site or district.
- The University will secure an intern administrative credential authorizing service permitted by the preliminary administrative

services credential once the student has been formally admitted to the intern program.

### **Required Coursework**

(10 courses; 45 quarter units)

Students must complete all coursework with a GPA of 3.0 within seven years. Grades of "D" and "F" are not accepted. Any break in enrollment extending for longer than one year requires students to participate in the re-admission process including any new program requirements. The intern credential, however, is valid for a maximum of two years and all work leading to a regular preliminary administrative services credential must be completed within that time for the student to be able to retain a position requiring a preliminary administrative services credential.

### Tier I Program Outcome/Goals, Modified

Upon completion of the program, students will:

- Possess the necessary skills to become successful practicing school administrators
- Demonstrate their knowledge of practice related to curriculum standards and accountability leading to the improvement of teaching and learning
- Possess the technological background for making data driven decisions leading to instructional improvement
- Have developed an ethical framework for effective educational leadership
- Demonstrate through practice a sensitivity to and an understanding of cultural diversity and its significance in building effective school communities
- Possess the legal, financial, and human resources knowledge necessary for leading and managing schools

### Prerequisite

(1 course; 4.5 quarter units)

EXC 625 Exceptional Children in the Classroom\*

\*Note: EXC 625 may be met with experience working with students with disabilities in a less-restricted environment. Waiver requires faculty review and approval of experience.

### **Core Requirements**

(9 courses; 40.5 quarter units)

- EDA 623 Curriculum Alignment , Assessment, and Accountability
- EDA 624 Supervision and Evaluation of Instruction
- EDA 625 Technology and Data Analysis for Effective Instruction
- EDA 614 Educational leadership in Schools Today
- EDA 626 Human Resources in Diverse School Communities
- EDA 618 Legal and Ethical Foundations of Education
- EDA 619 Financial Leadership and Management
- EDA 620I Intern Field Experience in Educational Administration\*
- EDA 628 Seminar in Educational Leadership and Management\*\*

\*This course is taken in place of EDA 620B, the practicum/field work required in the regular preliminary administrative services credential program. Interns register once for this course, at the beginning of their work in the intern program, and meet monthly with the instructor over the duration of their intern program which must last for one full year.

\*\*At least two other credential courses, not including EDA 620I, must be completed before taking the course.

Interns may elect to take some courses online. They must, however, participate in EDA 620I onsite in accordance with the schedule of the University.

### **Completion Requirements**

Completion of a minimum of 31.5 quarter hours in residence. Units from the regular National University preliminary administrative services credential program, successfully completed within the past seven years, are acceptable.

- EDA 620I, Intern Field Experience in Educational Administration, must be taken in residence onsite.
- All interns complete an extensive comprehensive written examination addressing core competencies of the program. The examination will be completed over the duration of the intern program and presented as a research based essay during the intern's final month of participation in EDA 620I.
- All interns will be required to participate in an oral exit examination. The oral examiners will represent both National University and the sponsoring site/district. The examination will be conducted the last month the intern is in the program.
- Verification of meeting the requirement of EXC 625 with equivalent course of study or in lieu of experience.
- Exit interview with credential advisor to obtain and submit necessary application (must have valid credit card to pay for CTC online application fee.)
- Zero account balance

# ■ PROFESSIONAL (TIER II) ADMINISTRATIVE SERVICES CREDENTIAL

(780-000-753) (3 courses; 13.5 quarter units)

### Professional Administrative Tier II Program

The Professional Administrative Services (Tier II) program provides a field-based preparation for administrators seeking a successor credential for administrators to replace their expiring Tier I Preliminary Administrative Services Credential. It consists of three courses or 13.5 hours: Induction Seminar, Professional Development Seminar, and Assessment Seminar, and may be completed in three months.

### Tier II Program Outcomes/Goals

Upon successfully completing this program, candidates for the credential will be able to:

- Identify areas of interest for personal study and professional development
- Identify supplementary areas of study to enhance candidate's learning within administrative domains
- · Select mentors and build working relationships with them
- Prepare goals for personal and professional growth
- Create and maintain a vision of learning at the candidate's school or school district
- Develop and sustain a school culture focused on teaching and learning
- Provide organizational management of the many aspects of the candidate's school and/or school district.
- Demonstrate sensitivity to school and family needs in diverse communities
- Provide ethical leadership within the candidate's school and/or school district
- Apply knowledge of the political, social, economic, legal and cultural context of educational leadership in the candidate's school and/or school district
- Present an assessment of the Professional Clear Administrative Credential coursework in relationship to current and future administrative responsibilities
- Discuss and reflect upon the completion of the Induction Plan
- Assess the efficacy of their experiences with mentoring
- Assess their individualized professional growth through participation in the professional clear administrative services

credential program

Develop a plan for future personal and professional growth

### **Admission Requirements**

- Formal application to the University and to the Credentials Department. See "Admission to Credential Programs"
- Appointment with credential advisor within 30 days of admission in order to obtain necessary credential information documents and to avoid matriculation or scheduling errors
- Possession of a bachelor's degree with a GPA of 2.5 or a complete evaluation from a CTC-approved international evaluation agency.
- Possession of a valid preliminary administrative services credential

### Scheduling

All courses are scheduled by an advisor.

### **Completion Requirements**

- A minimum of two years of successful, full-time school administrative experience in the public schools, or private schools of equivalent status. Students must work under contract while holding a valid preliminary administrative services credential for the entire two years.
- Completion of a commission-approved program for the professional administrative services credential
- Grades are "S" (Satisfactory) or "U" (Unsatisfactory). All grades must be "S."
- Zero account balance

### Program Requirements

(3 courses; 13.5 quarter units)

Students must complete all coursework with a grade of "S" within the time allowed by CTC for the granting of the Tier II credential.

EDA 607 Induction Seminar

EDA 608 Professional Development Seminar EDA 609 Assessment Seminar

EDA 609 Assessment Seminar Courses must be completed in the above sequence.

### **Exit Requirements**

- Copy of valid Preliminary Level I Administrative Services credential
- Verification of two years of experience in an educational administrative position
- Exit interview with credentials advisor to obtain and submit application and current CTC fee
- Exit interview with full-time faculty
- Zero account balance

### ■ PUPIL PERSONNEL SERVICES CREDENTIAL SCHOOL COUNSELING (PPSC) (780-000-758)

(20 courses; 88.5 quarter units)

This credential authorizes the holder to serve as an educational counselor in a school setting at any grade level K-12. This credential is valid for a maximum of five years. Student should see "Admissions to Credential Programs" for specific admission information.

Students who have completed an appropriate master's degree in counseling or psychology from National University or another regionally-accredited institution can work toward a Pupil Personnel Services Credential with a School Counseling Specialization (PPSC) without receiving another master's degree. To meet state-required competencies for the credential, students must complete either the entire Master of Science in Educational Counseling or the prerequisites and requirements for the MS in Educational Counseling not already met in previous graduate coursework.

Students must maintain a 3.0 GPA. Grades of "D" and "F" are not accepted. Course equivalence cannot be granted for life experience. Students who received a grade less than B- in CED 610, CED 611, CED 603 and CED 601 must repeat the course. Any grades of "C" in two or more classes must be repeated. Students who are absent for a period of 12 months or more must re-enroll and be re-evaluated under a new catalog. GPAs of lower than 3.0 may be evaluated by the faculty and may be required to repeat the course at their own expense before being allowed to continue in the program.

### **Admission Requirements**

Students seeking a Pupil Personnel Services Credential in School Counseling (PPSC) must:

- Possess an appropriate master's degree in educational counseling, psychology, or social work if entering the credential ONLY program. All students need to have previous coursework evaluated by the PPS lead faculty advisor.
- Attend CED 604, Orientation and Field Experience in School Counseling. Students may take prerequisites only while taking CED 604.
- Students will receive a credential packet, and complete a "candidate statement" that is reviewed and signed by the faculty advisor for admission into the program.
- Students must return their credential packet to the credential advisor by the end of the course otherwise students will receive an "I" for CED 604.

### **Program Advisement**

All PPSC students will be assigned a faculty advisor. All students are expected to meet with their assigned faculty advisor upon admission to the program, before starting their internship, and after completion of coursework and internship and throughout the program as needed.

### **Program Prerequisites**

(3 course, 13.5 quarter units)

It is strongly recommended, but not required, that applicants have one year of related professional experience working with school-age children, preferably in a school or other institutional setting.

Before being admitted to this program, students must complete the following coursework (or equivalent):

| MTH 210 | Introduction to Probability and Statistics |
|---------|--|
|         | (Prerequisite: Placement Evaluation)       |
| PSY 301 | Child Development                          |
|         | (Prerequisites: ENG 100/101)               |
| PSY 100 | Introduction to Psychology                 |
|         |  |

Students will meet with a faculty advisor for evaluation of prior coursework to meet program prerequisites. Only CED 604 and prerequisites can be taken prior to admission.

### **Core Requirements**

(13 courses; 55.5 quarter units)

- CED 604 Orientation and Field Experience in School Counseling (1.5 quarter units)
- TED 611 Educational Psychology
- CED 600 Advanced Child and Adolescent Development
- CED 602 Contemporary Issues in School Counseling
- CED 606 Development and Evaluation of School Counseling Programs and Services

| CED 610 | Advanced Counseling Theories and Techniques        |
|---------|--|
|         | (Prerequisite: CED 600)                            |
| CED 611 | Group Counseling                                   |
|         | (Prerequisite: CED 610)                            |
| CED 603 | Multicultural Counseling                           |
|         | (Prerequisites: CED 610, CED611 and Advancement to |
|         | Candidacy)   |
| CED 601 | Consultation in the Schools                        |
| CED 612 | Career and Academic Counseling                     |
| CED 613 | Psycho-Educational Assessment                      |

- CED 613 Psycho-Educational Assessment
- CED 614 Legal and Ethical Practices for School Counselors
- PED 676 Introduction to Applied Behavior Analysis

### Practicum (100 hours)

Students are required to complete 100 hours of practicum prior to starting internship. These hours will be completed throughout CED coursework.

- · Proof of Certificate of Clearance or Teaching Credential
- Provide verification of a negative tuberculin examination taken within the last four years
- Complete all prerequisite coursework (10 courses to include CED 604, CED 610, CED 611, CED 603, and CED 601)
- Complete 100 hours of approved logged practicum
- Submit an Internship Application to the Internship Coordinator/ Lead Faculty and be assigned a University Supervisor.
- Proof of Basic Skills Requirement

#### Internship is then scheduled by lead faculty or internship coordinator

Students should refer to the current *PPS Graduate Handbook for School Counseling* for specific information about the practicum and internship requirements.

Students interested in a district paid internship need to contact a credential advisor for prerequisite and process information.

#### Internship

(4 courses; 16.5 quarter units) (*Must be completed in residence*/600 hours)

Each 4.5 units of fieldwork require 200 direct service hours. A minimum of 600 clock hours is required. The student will draft a plan with the site supervisor and university supervisor, meet weekly with the site supervisor for supervision, keep weekly logs of each 200 hours of internship, and submit logs to the university supervisor. The internship consists of the following:

- No more than two sites at one time with no more than two site supervisors at one time
- Includes two levels
- Students must attend CED 620 sessions concurrently with internship.

CED 620 Best Practices Seminar in School Counseling (3 quarter units)

Students will complete (13.5 quarter units) from the following courses (Elementary and Secondary):

CED 616School Counseling Internship Part I (200 hours)CED 617School Counseling Internship Part II (200 hours)CED 618School Counseling Internship Part III (200 hours)

#### **Exit Requirements**

In order to receive a PPSC credential, students must complete courses within seven years and do the following:

 Successful completion of coursework, portfolio, practicum, internship, and the exit process.

- Schedule and pass an exit interview with faculty advisor and university supervisor
- Submit passing scores on the ETS National Praxis examination-School Counseling (passage score is 570)
- Complete online program Evaluation Form-School Counseling
- Submit written evaluations of performance in Internship experiences by site supervisor to university supervisor
- Schedule and attend exit appointment with credential advisor to receive final clearance and credential documents
- Have a zero account balance

#### **Credential Application Information**

Upon successful completion of the coursework and internship, students must meet with a credential advisor to receive, complete and submit the Commission on Teacher Credentialing application form for the PPSC School Counseling credential.

### PUPIL PERSONNEL SERVICES CREDENTIAL SCHOOL PSYCHOLOGY (PPSP)

(780-000-760) (24 courses; 97.5 quarter units)

This credential authorizes the holder to serve as a school psychologist in a school setting at any grade level K-12. This credential is valid for a maximum of five years. Students should see "Admissions to Credential Programs" for specific admission information.

Students who have completed an appropriate master's degree in counseling, social work, or psychology from this or another regionally-accredited institution can work toward a Pupil Personnel Services Credential with a School Psychology Specialization (i.e. without receiving another master's degree). To meet state-required competencies for the credential, students must complete either the entire Master of Science in School Psychology or the prerequisites and requirements for the MS in School Psychology not already met in graduate coursework.

Students must maintain a 3.0 GPA. Students who receive a grade of a "C" in two or more courses will be evaluated by the faculty and will be required to repeat the coursework at their own expense before being allowed to continue in the program. A grade less than B- is not accepted in CED 600, PED 665, PED 680, and PED 667

#### Admission Requirements

Students seeking a Pupil Personnel Services Credential in School Psychology (PPSP) must:

- Possess an appropriate master's degree in educational counseling or psychology if entering the credential ONLY program.
- Attend PED 604, Orientation and Field Experience in School Psychology. Students may take prerequisites only while taking PED 604.
- Students will receive a credential packet, and complete a "candidate statement" that is reviewed and signed by the faculty advisor for admission into the program.
- Students must return their credential packet to the credential advisor by the end of the course otherwise students will receive an "I" for PED 604.

### **Program Advisement**

All PPSP students will be assigned a faculty advisor. All students are expected to meet with their assigned faculty advisor upon admission into the program, before starting their internship and after completion of coursework and internship hours.

### **Program Prerequisites**

(4 courses; 18 quarter units)

It is strongly recommended that applicants have one year of related professional experience working with school-age children, preferably in a school or other institutional setting. Before being admitted to this program, students must complete the following coursework (or equivalent).

| MTH 210 | Introduction to Probability and Statistics |
|---------|--|
|         | (Prerequisite: Placement Evaluation)       |
| PSY 301 | Child Development                          |
|         | (Prerequisites: ENG100/101)                |
| PSY 430 | Introduction to Psychopathology            |
|         | (Prerequisites: ENG 100/101 and PSY 100)   |
| EXC 625 | Exceptional Children in the Classroom      |

Students will meet with a faculty advisor for evaluation of prior coursework to meet program prerequisites. Only PED 604 and prerequisites can be taken concurrently prior to admission.

### **Core Requirements**

(19 courses; 78 quarter units)

| PED 604            | Orientation and Field Experience in School Psychology (1.5 quarter units) |
|--------------------|---|
| CED 600            | Advanced Child and Adolescent Development                                 |
| PED 665            | Tests and Measurements  |
|                    | (Prerequisite: PED 604 )  |
| PED 680            | Roles, Issues and Ethics in School Psychology                             |
| PED 667            | Graduate Seminar in Child and Adolescent                                  |
|                    | Psychopathology   |
| CED 610            | Advanced Counseling Theories and Techniques                               |
|                    | (Prerequisites: CED 604)  |
| PED 666            | Graduate Seminar in Human Neuropsychology                                 |
|                    | (Prerequisite: PED 600)   |
| PED 683<br>CED 601 | Program Evaluation<br>Consultation in the Schools                         |
| CED 601            |   |
| PSY 653            | (Prerequisite: CED 610)<br>Psychopharmacology                             |
| PED 670            | Graduate Seminar in Social Psychology                                     |
| 1 ED 070           | (Prerequisite: PED 604 and Advancement to Candidacy)                      |
| PED 671            | Assessment of Cognitive Abilities   |
| 1 22 0/1           | (Prerequisites: PED 604, PED 665 and PED 680)                             |
| PED 672            | Advanced Psycho-educational Assessment                                    |
|                    | (Prerequisite: PED 671)   |
| PED 673            | Emotional/ Behavior Assessment of Children and                            |
|                    | Adolescents   |
|                    | (Prerequisite: PED 672)   |
| PED 674            | Preschool/Low Incidence Assessment  |
|                    | (Prerequisite: PED 673)   |
| PED 675            | Alternative Assessment for Multicultural Populations                      |
|                    | (Prerequisite: PED 674)   |
| PED 676            | Introduction to Applied Behavior Analysis                                 |
| PED 677            | Graduate Seminar in Curriculum Assessment and                             |
|                    | Interventions (1.5 quarter units)   |
| PED 678            | Practicum in School Psychology (3 quarter units)                          |
|                    | ( <i>Prerequisites: PED 671, PED 672, PED 673, PED 674, and</i>           |
|                    | PED 675)  |

Students are required to complete 450 hours of practicum prior to starting their internship. Students must complete the practicum experience under the supervision of a credentialed (two years) school psychologist. National University school psychology students will complete all practicum experiences in the school setting.

In PED 678 (Practicum in School Psychology) students will do their practicum hours and experiences only in school based settings. Student performance will be evaluated by program faculty and a school site psychologist through completion of course requirements.

### **Internship Prerequisites**

Before beginning internship, students must:

- Provide Proof of Certificate of Clearance
- Provide verification of a negative tuberculin examination taken within the last four years
- Complete prerequisite coursework and all PED courses (except PED 685)
- · Complete 450 hours of approved, logged practicum
- Submit an Internship Application to the internship coordinator/lead faculty and be assigned a university supervisor.
- · Internship is then scheduled by placement specialist
- Pass the Basic Skills Requirement

Students should refer to the current *PPS Graduate Handbook for School Psychology* for specific information about the practicum and internship requirements.

Students interested in a district paid internship need to contact a credential advisor for prerequisite and process information.

### Internship

(5 courses; 21 quarter units) (Must be completed in residence/1200 hours)

Each 4.5 units of internship require 300 direct service hours. A minimum of 1200 clock hours is required. The student will draft a plan with the site supervisor and university supervisor, meet weekly with site supervisor for supervision, keep weekly logs of each 300 hours of internship, and submit logs to university supervisor. The internship consists of the following:

- No more than two sites at one time with no more than two site supervisors at one time
- Includes two levels (Elementary and Secondary)
- Students currently employed at a school setting (i.e. teacher, school counselor) will need to do internship at another school location

PED 685 Best Practices Seminar in School Psychology (3 quarter units)

- (Taken concurrently with internship)
- PED 687 School Psychology Internship Part I (300 hours)
- PED 688 School Psychology Internship Part II (300 hours)
- PED 689 School Psychology Internship Part III (300 hours)
- PED 690 School Psychology Internship Part IV (300 hours)

### **Exit Requirements**

In order to receive a PPSP credential, students must complete courses within seven years and do the following requirements:

- Successful completion of coursework, portfolio, practicum, internship, and the exit process.
- Schedule and pass an exit interview with faculty advisor and university supervisor
- Submit passing scores from the ETS National Praxis examination-School Psychology (passage score is 590)
- Complete online program Evaluation Form-School Psychology
- Submit written evaluations of performance in Internship experiences by site supervisor to university supervisor
- Schedule and attend exit appointment with credential advisor to receive final clearance and credential documents
- Have a zero account balance

### **Credential Application Information**

Candidates must complete their internship within 18 months. Upon successful completion of the coursework and internship, students

must meet with a credential advisor to complete and submit the Commission on Teacher Credentialing application form for the PPSP School Psychology credential.

### PRELIMINARY LEVEL I EDUCATION SPECIALIST CREDENTIALS: Mild/Moderate Disabilities or Moderate/Severe Disabilities or Deaf and Hard-of-Hearing with CLAD Certificate or concurrent Multiple or Single subject credential

In California, Preliminary Level I Education Specialist Credentials in Mild/Moderate Disabilities and Moderate/Severe Disabilities authorize the provision of services to individuals in grades K through 12, including adults. The Mild/Moderate Disabilities credential authorizes the teaching of individuals with specific learning disabilities, mental retardation, other health impairments, and emotional disturbance. The Moderate/Severe Disabilities credential authorizes the teaching of individuals with autism, mental retardation, deaf-blindness, emotional disturbance, and multiple disabilities.

For students enrolled in the Level I Education Specialist credential with a CLAD certificate, please note that classes have been approved as a set by the CTC. No coursework is accepted in transfer from another university for this program and no substitutions are allowed. All coursework for the CLAD certificate must be taken at National University, which will provide a recommendation to the CTC.

Although many of the courses in this credential program are offered online, certain testing courses and fieldwork in the Advanced Specialization program must be taken on-site.

### Admission Requirements

Before being accepted to the credential program, students must possess a bachelor's degree from a regionally-accredited college or university and be enrolled in the University. Students with a non-U.S. degree must receive an evaluation from a CTC-approved international evaluation agency prior to admission and starting the first course. Students are admitted to the credential program when they attend the credential orientation meeting (EXC 602A or a separate National University orientation) and return the completed credential packet. (See Admission to Credential Programs in the previous section.)

National University recognizes its responsibility to exercise judgment in recommending persons for California teaching credentials. Students must submit a completed credentials packet and be interviewed by a credential advisor and a School of Education faculty member. The credentials packet is available from a credential advisor at the credential orientation (EXC 602A or a separate National University orientation) meeting and must be completed and submitted before the end of course EXC 602A, within the first 30 days of enrollment. Course equivalence is not granted for life experience.

### Scheduling

All generic courses are scheduled by an admissions advisor. A member of the credential department will schedule the advanced specialization courses and student teaching when students complete the generic core exam.

### Admission to Field Experiences

Before beginning any part of the Student Teaching, students must:

- · Return the completed credentials packet within 30 days of admission and orientation
- Provide proof of passing the Basic Skills Requirement \*

- Demonstrate subject-matter competency\*
- Provide proof of possession of a Certificate of Clearance or other valid document
- Provide verification of a negative tuberculin examination taken within the last four years
- Interview with a School of Education faculty member
- Complete all other coursework in the Education Specialist program
- Complete the prerequisite coursework with a 3.0 GPA. "D" and "F" grades are not accepted.

\* Highly recommended prior to admission and at the first available test date after enrollment. Must be passed prior to advanced specialization classes.

Note: Detailed requirements for field experiences are listed in the Student Teaching Handbook and in the Credential Packet.

### **Recommendation for Preliminary Level I Education** Specialist Credential

In order to be recommended for a California Preliminary Level I Education Specialist credential in Mild/Moderate, Moderate/Severe Disabilities or Deaf and Hard-of-Hearing, students must show:

- Successful completion of the admission process.
- Successful completion of the field experience activities, including Student Teaching.
- Successful completion of the program within seven years. Proof of passing with a grade of "C" or better coursework or an examination on the U.S. Constitution.
- Official transcripts of all colleges/universities attended on file at National University.
- Proof of passing Basic Skills Requirement.
- Proof of meeting the appropriate subject matter competence.
- Completion of 31.5 quarter units in residence.
- Valid CPR certification for Infant, Child and Adult.
- Maintenance of a GPA of 3.0 in credential program coursework; "D" and "F" grades are not accepted.
- Receipt of a Certificate of Clearance or other valid document.
- Successful completion of the generic core and advanced specialization requirements.
- Successful completion of the exit process, including passing the Exit Exam.
- Proof of passing the Reading Instruction Competence Assessment (RICA)
- Verification of passing scores (BCLAD only) on the verbal and written language proficiency examinations.
- Zero account balance prior to student teaching and completion.
- Attend exit appointment with credential advisor to receive final clearance and credential documents
- Letter of recommendation from Master Teacher (for DHH students only)
- Comprehensive Examination (for DHH students only)

See a Credential Advisor for specific information regarding any of these requirements.

### PRELIMINARY LEVEL I EDUCATION SPECIALIST CREDENTIAL:

### Mild/Moderate Disabilities with CLAD Certificate (780-356)

(22 courses; 84 quarter units)

### **Program Prerequisites**

These courses are required prior to student teaching. (2 courses; 9 quarter units)

| HED 602 | Introductory Health Education: K-12        |
|---------|--|
| EDT 608 | Computer-Based Technology in the Classroom |

### **Core Requirements**

(10 courses; 42 quarter units)

Field experience courses must be taken at the beginning of the program and may be taken concurrently with other courses.

| EXC 602A | 1 1  |
|----------|--|
|          | (3 quarter units)                                    |
| EXC 602B | Field Experience: Inclusive Settings                 |
|          | (3 quarter units)                                    |
| EXC 604  | Exceptionality and Diversity in the Classroom        |
| TED 615  | Foundations of Education                             |
| TED 611  | Educational Psychology                               |
| EXC 620  | Positive Behavior Support                            |
| EXC 630  | Assessment and Instructional Planning for Special    |
|          | Needs Students                                       |
|          | (Meets one night per week over two months)           |
| TED 621A | Language Development Methods for the Elementary      |
|          | School   |
|          | (Prerequisite: TED 615)                              |
| or       |  |
| TED 623  | Language Development Methods for Secondary and       |
|          | Middle Schools                                       |
|          | (Prerequisite: TED 615)                              |
| TED 621B | Reading and Language Arts Methods for the Elementary |
|          | School   |
|          | (Prerequisites: TED 615 and TED 621A)                |
| EVC (EO  | Consultation and Callaboration for Second Education  |

EXC 650 Consultation and Collaboration for Special Education

#### Generic Core Exam

Verify passage of Basic Skills Requirement and Subject Matter Competency

Note: Generic Core Exam must be passed prior to enrollment in Advanced Specialization Courses.

### **Advanced Specialization Requirements**

(10 courses; 33 quarter units)

| EXC 644      | Reading and Language Arts Methods for Special           |
|--------------|---|
| -            | Education (one night per week over two months)          |
| EXC 644A     | Field Study: Reading and Language Arts Methods for      |
|              | Special Education                                       |
|              | (1.5 quarter units)                                     |
| EXC 660      | Instruction of Learners with Mild/Moderate Disabilities |
| EXC 660A     | Field Study: Instruction of Learners with Mild/Moderate |
|              | Disabilities  |
|              | (1.5 quarter units)                                     |
| EXC 615      | Technology for Persons with Disabilities                |
| EXC 615A     | Field Study: Technology for Persons with Disabilities   |
|              | (1.5 quarter units)                                     |
| and          | 1   |
| EXC 603A     | Student Teaching Seminar (1.5 quarter units)            |
|              | (Must be taken concurrently with Student Teaching)      |
| EXC 685A     | Student Teaching: Mild/Moderate Disabilities            |
| EXC 685B     | Student Teaching: Mild/Moderate Disabilities            |
| Exit Portfol | io  |
| Exit Exam    | Apply for Mild/Moderate Level Credential                |
|              | Must obtain Clearance to take CLAD 627 to apply for     |
|              | CLAD Certificate.                                       |
| CLD 627      | Methodology for Cross-Cultural Instruction              |
|              | (taken after completion of student teaching)            |
|              | (unter unter completion of student teaching)            |

Apply for CLAD Certificate.

CLAD certificate classes have been approved as a set by the CTC. No transfer coursework is accepted from another university for this program and no substitutions are allowed. Students must hold a valid credential to be granted a certificate.

The following must be in the student's file prior to filing for a credential:

- Proof of passing the U.S. Constitution exam or transcript verifying completed U.S. Constitution coursework
- Certificate of Clearance or equivalent document
- Successful completion of the exit process, including passing the Exit Exam.
- Passing grade on the Basic Skills Requirement.
- Verification of subject matter competency.
- Proof of passing the Reading Instruction Competence Assessment (RICA).
- Zero account balance prior to student teaching and completion.
- Completion of a minimum of 31.5 quarter units in residence.
- Completion of credential program within seven years.
- Grades of "D" and "F" are not accepted.
- Attend exit appointment with credential advisor to receive final clearance and credential documents

## ■ PRELIMINARY LEVEL I EDUCATION SPECIALIST CREDENTIAL:

## **Moderate/Severe Disabilities with CLAD Certificate** (780-357)

(22 courses; 84 quarter units)

### **Program Prerequisites**

These courses are required prior to student teaching. (2 courses; 9 quarter units)

HED 602 Introductory Health Education: K-12 EDT 608 Computer-Based Technology in the Classroom

### **Core Requirements**

(10 courses; 42 quarter units)

Field experience courses must be taken at the beginning of the program and may be taken concurrently with other courses.

| EXC 602A                             | Field Experience: Special Education (3 quarter units)        |  |
|--------------------------------------|--|--|
| EXC 602B                             | Field Experience: Inclusive Settings (3 quarter units)       |  |
| EXC 604                              | Exceptionality and Diversity in the Classroom                |  |
| TED 615                              | Foundations of Education                                     |  |
| TED 611                              | Educational Psychology                                       |  |
| EXC 620                              | Positive Behavior Support                                    |  |
| EXC 630                              | Assessment and Instructional Planning for Special            |  |
|                                      | Needs Students (One night per week over two months)          |  |
| TED 621A                             | Language Development Methods for the Elementary              |  |
|                                      | School   |  |
|                                      | (Prerequisite: TED 615)                                      |  |
| or                                   |  |  |
| TED 623                              | Language Development Methods for Secondary and               |  |
|                                      | Middle Schools   |  |
|                                      | (Prerequisite: TED 615)                                      |  |
| TED 621B                             | Reading and Language Arts Methods for the Elementary School  |  |
|                                      | (Prerequisites: TED 615 and TED 621A)                        |  |
| EXC 650                              | Consultation and Collaboration for Special Education         |  |
| Generic Co                           |  |  |
| Note: The si                         | ubject matter examination and Basic Skills must be taken and |  |
|                                      | e the candidate can register for the Advanced Specialization |  |
| courses.                             |  |  |
| 2211.500.                            |  |  |
| Advanced Specialization Requirements |  |  |
|                                      | s; 33 quarter units)   |  |
|                                      |  |  |

| EXC 644  | Reading and Language Arts Methods for Special      |
|----------|--|
|          | Education (one night per week over two months)     |
| EXC 644A | Field Study: Reading and Language Arts Methods for |
|          | Special Education (1.5 quarter units)              |
| EXC 665  | Instruction of Learners with Moderate/Severe       |
|          | Disabilities                                       |
| EXC 665A | Field Study: Instruction of Learners with          |
|          | Moderate/Severe Disabilities (1.5 quarter units)   |

| EXC 615<br>EXC 615A | Technology for Persons with Disabilities<br>Field Study: Technology for Persons with Disabilities |
|---------------------|---|
|                     | (1.5 quarter units)   |
| and                 | -   |
| EXC 603A            | Student Teaching Seminar (1.5 quarter units)  |
|                     | (Must be taken concurrently with student teaching)  |
| EXC 690A            | Student Teaching: Moderate/Severe Disabilities – I  |
| EXC 690B            | Student Teaching: Moderate/Severe Disabilities – II   |
| Exit Exam           | Apply for Moderate/Severe Level Credential  |
|                     | Must obtain Clearance to take CLD 627 to apply for  |
|                     | CLAD Certificate.   |
| CLD 627             | Methodology for Cross-Cultural Instruction  |
|                     | (taken after completion of student teaching)  |
|                     |   |

Apply for CLAD Certificate

## ■ PRELIMINARY LEVEL I EDUCATION SPECIALIST:

### Mild/Moderate Disabilities with Multiple or Single Subject Credential Concurrent with BCLAD option

(26 courses; 100.5 quarter units TED) (780-356) (-362 Single) (-363 Multiple) (27 courses; 105 quarter units BCLAD) (780-356) (-364 B Single) (-365 B Multiple)

### **Program Prerequisites**

These courses are required prior to student teaching. (2 courses; 9 quarter units)

| HED 602 | Introductory Health Education: K-12        |
|---------|--|
| EDT 608 | Computer-Based Technology in the Classroom |

BCLAD students must pass the oral language, grammar, reading and writing proficiency examinations prior to the methods courses.

### **Core Requirements**

(TED 10 courses; 42 quarter units) (BCLAD 11 courses; 46.5 quarter units)

Field experience courses must be taken at the beginning of the program and may be taken concurrently with other courses.

| EXC 602A | Field Expe | erience | : Special    | Education | (3 | quarter | units) |  |
|----------|------------|---------|--------------|-----------|----|---------|--------|--|
| TNG (00D | T: 11 T    |         | <b>T 1</b> · | o         | 10 |         |        |  |

- EXC 602B Field Experience: Inclusive Settings (3 quarter units) EXC 604 Exceptionality and Diversity in the Classroom
- EXC 604 Exceptionality and Diversity in the Classroom BTE 612 History and Culture of Latinos in the United States
- (BCLAD only, taught in language of emphasis) TED 615 Foundations of Education
- TED 611 Educational Psychology
- EXC 620 Positive Behavior Support
- EXC 630 Assessment and Instructional Planning for Special Needs Students
- TED 621A Language Development Methods for the Elementary School
  - (Prerequisite: TED 615)

or

- TED 623 Language Development Methods for Secondary and Middle Schools (*Prerequisite: TED 615*)
- TED or BTE 621B Reading and Language Arts Methods for the Elementary School (*Prerequisites: TED 615 and TED 621A*)

EXC 650 Consultation and Collaboration for Special Education

### Generic Core Exam

### Multiple Subject

(2 courses; 9 quarter units)

TED 622A Curriculum and Instruction I: History, Social Science, Physical Education, Visual and Performing Arts (Prerequisite: TED 615 and TED 621A)

| and | l      |  |
|-----|--------|--|
| TEI | O 622B | Curriculum and Instruction II: Mathematics and Science ( <i>Prerequisites: TED 615 and TED 621A</i> )  |
| or  |        |  |
| BTI | E 622A | Curriculum and Instruction I: History, Social Science,<br>P.E., Visual and Performing Arts (taught in language of<br>emphasis)               |
|     |        | (Prerequisites: TED 615 and TED 621A)  |
| and | !      |  |
| BTI | E 622B | Curriculum and Instruction II: Mathematics and Science<br>(taught in language of emphasis)<br>( <i>Prerequisites: TED 615 and TED 621A</i> ) |
| or  |        |  |

### Single Subject

(2 courses; 9 quarter units)

| TED 625A | Curriculum and Development for Secondary and Middle Schools  |
|----------|--|
|          | (Prerequisites: TED 615 and TED 623)   |
| and      |  |
| TED 625B | Instruction and Classroom Management for Secondary and Middle Schools  |
|          | (Prerequisites: TED 615, TED 623 and TED 625A)   |
| or       |  |
| BTE 625A | Curriculum and Development for Secondary and Middle<br>Schools (taught in language of emphasis)<br>( <i>Prerequisites: TED 615 and TED 623</i> ) |
| and      |  |
| BTE 625B | Instruction and Classroom Management for   |
|          | Secondary and Middle Schools (taught in language of emphasis)  |
|          | (Prerequisites: TED 615, TED 623 and BTE 625A)   |
| ,        | of subject matter competence and Basic Skills Requirement are<br>ore the candidate can register for the Advanced Specialization                  |

Note: Proof of subject matter competence and Basic Skills Requirement are required before the candidate can register for the Advanced Specialization courses.

### **Advanced Specialization Requirements**

(12 courses; 40.5 quarter units)

| EXC 644   | Reading and Language Arts Methods for Special              |  |  |  |
|---|--|--|--|--|
| -   | Education (one night per week over two months)             |  |  |  |
| EXC 644A  | Field Study: Reading and Language Arts Methods for         |  |  |  |
|   | Special Education  |  |  |  |
|   | (1.5 quarter units)  |  |  |  |
| EXC 660   | Instruction of Learners with Mild/Moderate Disabilities    |  |  |  |
| EXC 660A  | Field Study: Instruction of Learners with Mild/Moderate    |  |  |  |
|   | Disabilities (1.5 quarter units)                           |  |  |  |
| EXC 615   | Technology for Persons with Disabilities                   |  |  |  |
| EXC 615A  | Field Study: Technology for Persons with Disabilities (1.5 |  |  |  |
|   | quarter units)   |  |  |  |
| TED 629   | Student Teaching Seminar (3 quarter units) (must be        |  |  |  |
|   | taken concurrently with student teaching)                  |  |  |  |
|   | E 630A Beginning Student Teaching                          |  |  |  |
| TED or BTE  | E 630B Student Teaching (General Education)                |  |  |  |
|   |  |  |  |  |
|   | Student Teaching Seminar                                   |  |  |  |
| (Must be taken concurrently with student teaching)(1.5 quarter units) |  |  |  |  |
|   |  |  |  |  |
| EXC 685A  | Student Teaching: Mild/Moderate Disabilities – I           |  |  |  |
| and   |  |  |  |  |
| EXC 685B  | Student Teaching: Mild/Moderate Disabilities – II          |  |  |  |
|   |  |  |  |  |
| Exit Portfol  | io – Multiple or Single Subject Credential, Special        |  |  |  |
| Education   | Education  |  |  |  |

Exit Exam - Mild/Moderate Level I Credential

The following must be in student's file prior to filing for a credential:

 Proof of a bachelor's degree from a regionally accredited IHE with a GPA of 2.5.

- Copy of evaluation (if a non- U.S. degree) by a CTC-approved international evaluation agency.
- Proof of passing the U.S. Constitution exam or transcript verifying completed U.S. Constitution coursework
- Certificate of Clearance or equivalent document
- Successful completion of the exit process, including passing the Exit Exam.
- Passing grade on the Basic Skills Requirement.
- Verification of subject matter competency.
- Proof of passing the Reading Instruction Competence Assessment (RICA).
- Zero account balance prior to student teaching and completion.
- Completion of a minimum of 31.5 quarter units in residence.
- Completion of credential program within seven years.
- Grades of "D" and "F" are not accepted.
- Valid CPR card (Infant, Child, and Adult)
- Attend exit appointment with credential advisor to receive final clearance and credential documents

## ■ PRELIMINARY LEVEL I EDUCATION SPECIALIST:

## Moderate/Severe Disabilities with Multiple or Single Subject Concurrent Credential with BCLAD option

(26 courses; 100.5 quarter units TED) (780-357) (-362 Single) (-363 Multiple) (27 courses; 105 quarter units BCLAD) (780-357) (-364 B Single) (-365 B Multiple)

### **Program Prerequisites**

These courses are required prior to student teaching. (2 courses; 9 quarter units)

HED 602Introductory Health Education: K-12EDT 608Computer-Based Technology in the Classroom

BCLAD students must pass the oral language, grammar, reading and writing proficiency examinations prior to the methods courses.

### **Core Requirements**

(TED 10 courses; 42 quarter units)

(BCLAD 11 courses; 46.5 quarter units) Field experience courses must be taken at the beginning of the program and may be taken concurrently with other courses.

Field Experience: Special Education (3 quarter units) EXC 602A EXC 602B Field Experience: Inclusive Settings (3 quarter units) EXC 604 Exceptionality and Diversity in the Classroom BTE 612 History and Culture of Latinos in the United States (BCLAD only) (taught in language of emphasis) **TED 615** Foundations of Education Educational Psychology TED 611 EXC 620 Positive Behavior Support EXC 630 Assessment and Instructional Planning for Special Needs Students TED 621A Language Development Methods for the Elementary School (Prerequisite: TED 615) or **TED 623** Language Development Methods for Secondary and Middle Schools (Prerequisite: TED 615) TED or BTE 621B Reading and Language Arts Methods for the Elementary School (Prerequisites: TED 615 and TED 621A) EXC 650 Consultation and Collaboration for Special Education

Generic Core Exam

### **Multiple Subject**

(2 courses; 9 quarter units)

| (**************                |  |
|--------------------------------|--|
| TED 622A                       | Curriculum and Instruction I: History, Social Science,<br>Physical Education, Visual and Performing Arts<br>( <i>Prerequisite: TED 615 and TED 621A</i> )                        |
| and<br>TED 622B                | Curriculum and Instruction II: Mathematics and Science ( <i>Prerequisites: TED 615 and TED 621A</i> )  |
| or<br>BTE 622A                 | Curriculum and Instruction I: History, Social Science,<br>P.E., Visual and Performing Arts (taught in language of<br>emphasis)<br>( <i>Prerequisites: TED 615 and TED 621A</i> ) |
| and<br>BTE 622B                | Curriculum and Instruction II: Mathematics and Science<br>(taught in language of emphasis)<br>( <i>Prerequisites: TED 615 and TED 621A</i> )                                     |
| or<br>Single Su<br>(2 courses; | <b>bject</b><br>9 quarter units)   |
| TED 625A                       | Curriculum and Development for Secondary and Middle<br>Schools<br>( <i>Prerequisites: TED 615 and TED 623</i> )  |
| and<br>TED 625B                | Instruction and Classroom Management for Secondary<br>and Middle Schools<br>(Prerequisites: TED 615, TED 623 and TED 625A)   |
| <i>or</i><br>BTE 625A          | Curriculum and Development for Secondary and Middle<br>Schools (taught in language of emphasis)<br>(Prerequisites: TED 615 and TED 623)  |
| and<br>BTE 625B                | Instruction and Classroom Management for Secondary<br>and Middle Schools (taught in language of emphasis)<br>(Prerequisites: TED 615, TED 623 and BTE 625A)                      |
|                                | of subject matter competence and Basic Skills Requirements are<br>ore the candidate can register for the Advanced Specialization   |
|                                | <b>I Specialization Requirements</b><br>s; 40.5 quarter units)   |

| EXC 644      | Reading and Language Arts Methods for Special         |
|--------------|---|
|              | Education (one night per week over two months)        |
| EXC 644A     | Field Study: Reading and Language Arts Methods for    |
|              | Special Education                                     |
|              | (1.5 quarter units)                                   |
| EXC 665      | Instruction of Learners with Moderate/Severe          |
|              | Disabilities  |
| EXC 665A     | Field Study: Instruction of Learners with             |
|              | Moderate/Severe Disabilities                          |
|              | (1.5 quarter units)                                   |
| EXC 615      | Technology for Persons with Disabilities              |
| EXC 615A     | Field Study: Technology for Persons with Disabilities |
|              | (1.5 quarter units)                                   |
| TED 629      | Student Teaching Seminar                              |
|              | (3 quarter units) (must be taken concurrently with    |
|              | student teaching)                                     |
| TED or BT    | E 630A Beginning Student Teaching                     |
| TED or BT    | E 630B Student Teaching (General Education)           |
|              |   |
| EXC 603A     | Student Teaching Seminar                              |
|              | (1.5 quarter units)                                   |
| EXC 690A     | Student Teaching: Moderate/Severe Disabilities – I    |
| EXC 690B     | Student Teaching: Moderate/Severe Disabilities – II   |
| Exit Portfol | lio – Multiple or Single Subject Credential           |

Exit Fortiono – Multiple of Single Subject Credential

### ■ PRELIMINARY LEVEL I: EDUCATION SPECIALIST CREDENTIAL:

DEAF AND HARD-OF-HEARING WITH CLAD CERTIFICATE (780-372)

(25 courses; 109.5 quarter units)

### Admission to the Program

Submit the following application documentation in ONE complete packet:

- Application for Admission to Education of the Deaf graduate program
- CD or DVD portfolio of ASL Fluency (video samples, 10 to 12 minutes maximum in length) including the following content:
   1. Introduce yourself and discuss your sign language acquisition experience
  - 2. Narrate an ASL story
  - 3. Narrate a selected work of children's literature
- Intermediate proficiency or better in American Sign Language competencies as assessed by Proficiency Interview
- Personal and professional goals essay (a writing sample, 1 full single spaced page maximum)

Send ONE complete application packet to: DHH Lead Faculty Advisor

National University 11255 North Torrey Pines Rd

La Jolla, CA 92037-1011

### Prerequisites

(10 courses; 43.5 quarter units)

- PSY 100 Introduction to Psychology or equivalent course
- PSY 301 Child Development
- PSY 427 Biological Psychology
- PSY 431 Theories and Techniques of Psychological Testing
- HED 602 Introductory Health Education: K-12
- EDT 608 Computer based Technology in the Classroom
- EXC 603 Typical and Atypical Development in Young Children
- EXC 604 Exceptionality and Diversity in the Classroom
- EXC 602B Field Experience: Inclusive Settings (3 quarter units)
- CLD 627 Methodology for Cross-Cultural Instruction

United States Constitution Requirement: pass test or submit course transcript.

### **Interdisciplinary Core Courses**

(3 courses; 13.5 quarter units)

| TED 615           | The Foundations of Education                    |  |
|-------------------|---|--|
| EXC 620           | Supporting Positive Behavior                    |  |
| TED 621A          | Language Development Methods for the Elementary |  |
|                   | School  |  |
| Generic Core Exam |   |  |

### Core Courses for the Education Specialist: Deaf and Hardof-Hearing Credential

(11 courses; 48 quarter units)

| DHH 600 | Introduction to Bilingual Education of Learners who are |
|---------|---|
|         | Deaf or Hard-of-Hearing: Theory and Practice            |
| DHH 601 | Signed Language Acquisition and Development             |

- DHH 602 Written and Spoken Acquisition and Development
- DHH 603 Assessment of Learners who are Deaf or Hard-of-Hearing
- DHH 604 Development of Literacy with Learners who are Deaf or Hard-of-Hearing
- DHH 605 Teaching Deaf Learners with Additional Special Needs
- DHH 606 Curriculum and Instruction in Programs for Deaf and

|          | Hard-of-Hearing Learners                                 |
|----------|--|
| DHH 607  | Bilingual - Multicultural Education of Deaf and Hard-of- |
|          | Hearing Learners   |
| DHH 608A | Student Teaching I                                       |
|          |  |

DHH 608B Student Teaching II

DHH 609 Student Teaching Seminar (3 quarter units)

(Must be taken concurrently with student teaching) Exit Comprehensive Exam-Deaf and Hard-Of-Hearing Level I Credential

Students seeking the Preliminary Level I Education Specialist- DHH credential must demonstrate Intermediate-high proficiency or better in American Sign Language competence as assessed by Proficiency Interview before taking:

### **Exit Requirements**

- Pass all required coursework with a B average. No grades of D or F are accepted.
- Pass the RICA
- Valid CPR card (Infant, Child, and Adult)
- Certificate of clearance (including fingerprint clearance)
- Letter of recommendation from Master Teacher
- Comprehensive Examination
- Apply for credential and CLAD certificate.

## SPECIAL EDUCATION INTERNSHIPS (781)

The University Internship credential programs provide opportunities for students to assume the responsibilities of full-time "teachers of record" while completing the credential coursework required to complete their Level I Education Specialist preparation program. Interns are salaried credentialed employees of a school district, nonpublic school, or agency and must have an offer of employment from an approved school district or agency that has or is willing to enter into a partnership agreement with National University. As such, they serve as employees of the district/agency and as interns with the university. University Internship credential students meet the requirements of No Child Left Behind (NCLB.)

National University students who are interested in becoming a university intern must complete and show verification of all prerequisite requirements and go through the internship eligibility process to determine suitability for the internship program. The internship program is intense and students must be selected to participate.

Throughout their credential program, interns receive direct support in the classroom from mentor teachers on a monthly basis. Interns will receive support from a local site intern support provider, a university support provider /mentor and a National University supervisor at different points in the internship program cycle. The credential program extends over approximately 18 months of course and field work. Depending on the number of courses completed at the time internship eligibility is determined, interns should receive a minimum of four months of support prior to applying for the 45 day supervised teaching experience at the end of the credential program.

An Internship Credential is valid for two years at the site of hire. As such, a university intern must be continuously enrolled in coursework, maintain an updated account balance, and register their internship status on a yearly basis with the Commission on Teacher Credentialing (CTC). Any changes in employment status while on an internship credential must be communicated to the credential advisor.

Hard-of-Hearing Learners

### Internship Credential Prerequisite and Eligibility Requirements

### Prerequisites

- Possess a baccalaureate degree from a regionally accredited college or university.
- Enrollment into a National University Education Specialist Credential program.
- Proof of subject matter competence.
- Proof of passing with a grade "C" or better coursework or an examination covering the U.S. Constitution.
- Proof of possession of a CTC document verifying fingerprint clearance.
- Proof of passing the Basic Skills Requirement.
- A negative result on a tuberculosis (TB) test taken within the last four years.
- Current account balance.
- 3.0 GPA
- Resume.
- A signed Acknowledgement of Terms and Agreements for an Internship Credential form (CP-1).
- Verification of completion of the 120 clock hours of required preservice coursework/field experience detailed below.

### **Eligibility Requirements**

In addition to completion of all prerequisites, students are required to verify completion of the following Intern Eligibility forms:

- 1. Verification of a partnership agreement between National University and the intern's potential employer.
- 2. District or agency offer of employment for the intern as a full time teacher of record in a setting appropriate for the credential being sought.
- 3. Faculty verification of intern eligibility determined in an interview with a lead internship faculty member.

### ■ INTERNSHIP – PRELIMINARY LEVEL I EDUCATION SPECIALIST CREDENTIAL: Mild/Moderate or Moderate/Severe Disabilities with CLAD Certificate

(22 courses; 82.5 quarter units)

### Pre-Service Coursework and Field Experience Requirements

The CTC mandates that all approved internship programs require a minimum of 120 hours of pre-service coursework (13.5 quarter units) or a combination of coursework and documented field

experience/observation/exposure. The pre-service requirement must be met in advance of beginning an internship and functioning as a "teacher of record."

Note: 4.5 quarter units are equal to 40 clock hours.

Note: EXC602A is only 3.0 quarter units for logging of classroom hours but it meets the 40 clock hours of pre-service requirements for internship because of the field observation component of the course.

### Required

| EXC 602A | Field Experience: Special Education (3 quarter units) |
|----------|---|
| EXC 604  | Exceptionality and Diversity in the Classroom         |

### AND

An additional 4.5 quarter units of coursework or 40 clock hours of field experience/observation/exposure is required. *CLD 627 is recommended, if using coursework.* 

Note: Documentation of experience must be on "official" school site or

district stationery and signed by the appropriate and fully qualified school site administrator. It must attest that the intern candidate has completed at least 40 hours of field experience/observation. This experience does not waive any coursework in the program.

### **Internship Specific Course Requirements**

An internship credential is required before enrollment into the following three courses that provide initial and ongoing support and training required by internship candidates. Interns must also attend and participate in the school district's regular workshops and collaborative monthly meetings with both the site and university support supervisors.

EXC 6551 Professional Induction Seminar (Mild/Moderate and Moderate/Severe) (3 quarter units over a two month time period). This course is added to the schedule upon starting the internship program. A National University mentor will be assigned at this time.

The following two courses will be added to the schedule once the intern has completed all Education Specialist coursework detailed below. The seminar is to be taken along side the 45 days of supervised teaching during which a University designated supervisor along with a district designated supervisor complete a series of observations and evaluations to assess the intern's teaching competencies.

EXC 603A Student Teaching Seminar (1.5 quarter units) to be taken during the "supervised teaching" experience at the end of the program.
EXC 685I Supervised Student Teaching for Interns (Mild/Moderate) (4.5 quarter units over a 45 day time period)
or
EXC 690I Supervised Student Teaching for Interns (Moderate/Severe) (4.5 quarter units over a 45 day time period)

### Preliminary Teaching Coursework Sequence for Interns

| CLD 627   | Methodology for Cross-Cultural Instruction (4.5)<br>(This course is a required course for the CLAD certificate |  |
|---|--|--|
|   | and fulfills internship requirements)  |  |
| EXC 602B  | Field Experience: Inclusive Settings (3)   |  |
| TED 615   | Foundations of Education (4.5)   |  |
| TED 611   | Educational Psychology (4.5)   |  |
| HED 602   | Introductory Health Education: K-12 (4.5)  |  |
| EDT 608   | Computer Based Technology in the Classroom (4.5)   |  |
| EXC 620   | Positive Behavior Support (4.5)  |  |
| EXC 630   | Assessment and Instructional Planning for Special  |  |
|   | Needs Students (4.5)   |  |
| TED 621A  | Language Development Methods for the Elementary<br>School (4.5)  |  |
| or  |  |  |
| TED623  | Language Development Methods for secondary and<br>Middle Schools (4.5)   |  |
| TED621B   | Reading and language Arts Methods for the Elementary School (4.5)  |  |
| EXC 650   | Consultation and Collaboration for Special Education (4.5)   |  |
| *At this point the generic core exam must be successfully completed for |  |  |

advancement to advanced specialization coursework.

### **Advanced Specialization Requirements**

- EXC 644 Reading and language Arts Methods for Special Education
- EXC 644A Field Study: Reading and Language Arts Methods for Special Education (1.5 quarter units)
- EXC 660 Instruction of Learners with Mild/Moderate Disabilities

- EXC 660A Field Study: Instruction of Learners with Mild/Moderate Disabilities (1.5 quarter units)
- or EXC 665 Instruction of Learners with Moderate/Severe Disabilities
- EXC 665A Field Study: Instruction of Learners with Moderate/Severe Disabilities (1.5 quarter units)

EXC 615 Technology for Persons with Disabilities

EXC 615A Field Study: Technology for Persons with Disabilities (1.5)

As stated in the Internship Specific Course Requirements section above; the following two courses will be added to the schedule once the advanced specialization courses are complete. This is the final and culminating portion of the program. These units do not count twice but are listed here to demonstrate where they will be completed in the program.

- EXC 603A Student Teaching Seminar (1.5) To be taken during the "supervised teaching" experience at the end of the program (see below).
- EXC 685I Supervised Student Teaching for Interns (Mild/Moderate) (4.5 quarter units over a 45 day time period)
- or EXC 6901 Supervised Student Teaching for Interns (Moderate/Severe) (4.5 quarter units over a 45 day time period)

Interns must also successfully complete the Exit exam, the special education internship experience and the RICA exam. Following this, candidates may apply for the Preliminary Education Specialist Credential.

### **Post-Internship Requirements**

The CLAD Certificate may be filed if candidates have completed CLD 627 Methodology for Cross-Cultural Instruction and filed the Preliminary Education Specialist Credential.

### ■ INTERNSHIP – PRELIMINARY LEVEL I EDUCATION SPECIALIST CREDENTIAL

#### Mild/Moderate or Moderate/Severe Disabilities with concurrent Multiple or Single Subject Credential with BCLAD option

(TED 26 courses; 99 quarter units) (BCLAD 27 courses; 103.5 quarter units)

BCLAD students must pass the oral language, grammar, reading and writing proficiency examinations prior to methods courses.

### **Pre-service Coursework and Field Experience Requirements**

The CTC mandates that all approved internship programs require a minimum of 120 clock hours of pre-service coursework (13.5 quarter units) or a combination of coursework and documented field experience/observation/exposure. The pre-service requirement must be met in advance of beginning an internship and functioning as a "teacher of record."

Note: 4.5 quarter units are equal to 40 clock hours.

Note: EXC602A is only 3.0 quarter units for logging of classroom hours but it meets the 40 clock hours of pre-service requirements for internship because of the field observation component of the course

EXC 602A Field Experience: Special Education (3 quarter units) EXC 604 Exceptionality and Diversity in the Classroom and

An additional 4.5 quarter units of coursework or 40 clock hours of field experience/observation/exposure.

Note: Documentation of experience must be on "official" school site or district stationary and signed by the appropriate and fully qualified school

site administrator attesting that the intern candidate has completed at least 40 hours of field experience/observation. This experience does not waive any coursework in the program.

### Internship Specific Course Requirements

An internship credential is required before enrollment into the following three courses. These courses provide initial and ongoing support and training that internship candidates require. Students must also attend and participate in school district's regular workshops and collaborative monthly meetings with intern and both support supervisors (site and university).

EXC 655I Professional Induction Seminar (Mild/Moderate and Moderate/Severe) (3 quarter units over a two month time period). This course is added to the schedule upon starting the internship program. A National university mentor will be assigned at this time.

The following two courses will be added to the schedule once the intern has completed all Education Specialist coursework detailed below. The seminar is to be taken along side the 45 days of supervised teaching during which a University designated supervisor along with a district designated supervisor complete a series of observations and evaluations to assess the Intern's teaching competencies.

- EXC 603A Student Teaching Seminar (1.5 quarter units) to be taken during the "supervised teaching" experience at the end of the program EXC 685I Supervised Student Teaching for Interns (Mild/Moderate) (4.5 quarter units over a 45 day time period) or EXC 690I Supervised Student Teaching for Interns (Moderate/Severe) (4.5 quarter units over a 45 day time period) Preliminary Teaching Coursework Sequence for Interns Field Experience: Inclusive Settings (3 quarter units) EXC 602B TED 621B Reading and Language Arts Methods for the Elementary School HED 602 Introductory Health Education: K-12 EDT 608 Computer-Based Technology in the Classroom TED 611 Educational Psychology EXC 620 Positive Behavior Support EXC 630 Assessment and Instructional Planning for Special Needs Students TED 621A Language Development Methods for the Elementary School or TED 623 Language Development Methods for Secondary and Middle Schools TED or BTE 622B Curriculum and Instruction II: Mathematics and Science (MS) or TED or BTE 625A Curriculum and Development for Secondary and
  - Middle Schools (SS)
  - TED or BTE 622A Curriculum and Instruction I: History, Social Science, PE, Visual and Performing Arts (MS) or
  - TED or BTE 625B Instruction and Classroom Management for Secondary and Middle Schools (SS)
  - EXC 650 Consultation and Collaboration for Special Education

\*At this point the generic core exam must be successfully completed for advancement to the advanced specialization coursework.

### **Advanced Specialization Requirements**

| EXC 644<br>EXC 644A | Reading and Language Arts Methods for Special<br>Education (one night per week over two months)<br>Field Study-Reading and Language Arts Methods for<br>Special Education (1.5 quarter units) |
|---------------------|---|
| EXC 660<br>EXC 660A | Instruction of Learners with Mild/Moderate Disabilities<br>Field Study: Instruction of Learners with Mild/Moderate<br>Disabilities (1.5 quarter units)  |
| or                  |   |
| EXC 665             | Instruction of Learners with Moderate/Severe<br>Disabilities  |
| EXC 665A            | Field Study: Instruction of Learners with<br>Moderate/Severe Disabilities (1.5 quarter units)   |
| EXC 615             | Technology for Persons with Disabilities  |
| EXC 615A            |   |

As stated in the Internship Specific Course Requirements section above; the following two courses will be added to the schedule once the advanced specialization courses are complete. This is the final and culminating portion of the program. These units do not count twice but are listed here to demonstrate where they will be completed in the program.

- EXC 603A Student Teaching Seminar (1.5 quarter units) to be taken during the "supervised teaching" experience at the end of the program
- EXC 685I Supervised Student Teaching for Interns (Mild/Moderate) (4.5 quarter units over a 45 day time period)
- or EXC 6901 Supervised Student Teaching for Interns (Moderate/Severe) (4.5 quarter units over a 45 day time period)

\*At this point students must successfully complete the special education exit exam, the special education internship experience and the RICA exam.

### **Post-Internship Coursework**

(TED 4 courses; 16.5 quarter units) (BCLAD 5 courses; 21 quarter units)

| BTE 612    | History | and Culture of Latinos in the United States    |
|------------|---------|--|
|            | (BCLA   | D students only)                               |
| TED 615    | Educat  | ional Foundations                              |
| TED 629    | Studen  | t Teaching Seminar (must be taken concurrently |
|            | with st | udent teaching)                                |
| TED or BTE | 630A    | Beginning Student Teaching                     |
| TED or BTE | 630B    | Student Teaching (Teacher Education)           |

\*At this point the student must successfully pass the multiple or single subject exit portfolio. An application can be filed for the multiple or single subject credential and the Preliminary Education Specialist Credential.

Note: If the teacher education portion of the program is not completed at the time of applying for the Education Specialist Credential, then CLD627 will need to be completed in order to be recommended for the CLAD certificate.

The following must be in student's file prior to filing for a credential:

- Successful completion of the exit process, including passing the Exit Exam and portfolio.
- Proof of passing the Reading Instruction Competence Assessment (RICA).
- Zero account balance
- Completion of a minimum of 31 quarter units in residence.
- Completion of credential program within seven years.

- Grades of "D" and "F" are not accepted.
- Valid CPR card (Infant, Child, and Adult)
- Attend exit appointment with credential advisor to receive final clearance and credential documents.

### ■ PRELIMINARY LEVEL I: EDUCATION SPECIALIST CREDENTIAL: DEAF AND HARD-OF-HEARING INTERNSHIP WITH CLAD CERTIFICATE (781-373)

(24 courses; 103.5 quarter units)

### Admission to the Program

Submit the following application documentation in ONE complete packet:

- Application for Admission to Education of the Deaf graduate program
- CD or DVD portfolio of ASL Fluency (video samples, 10 to 12 minutes maximum in length) including the following content:
   1. Introduce yourself and discuss your sign language acquisition experience
   2. Narrate an ASL story
  - 3. Narrate a selected work of children's literature
- Intermediate proficiency or better in American Sign Language competencies as assessed by Proficiency Interview
- Personal and professional goals essay (a writing sample, 1 full single spaced page maximum)

Send ONE complete application packet to

DHH Lead Faculty Advisor National University 11255 North Torrey Pines Rd La Jolla, CA 92037-1011

### **Prerequisite Courses**

(10 courses; 43.6 quarter units)

|  | PSY 100 | Introduction to | Psychology or | equivalent | coursework |
|--|---------|-----------------|---------------|------------|------------|
|--|---------|-----------------|---------------|------------|------------|

- PSY 301 Child Development
- PSY 427 Biological Psychology
- PSY 431 Theories and Techniques of Psychological Testing
- HED 602 Introductory Health Education: K-12
- EDT 608 Computer based Technology in the Classroom
- EXC 603 Typical and Atypical Development in Young Children
- EXC 604 Exceptionality and Diversity in the Classroom
- EXC 602B Field Experience: Inclusive Settings (3 quarter units)
- CLD 627 Methodology for Cross-Cultural Instruction

United State Constitution Requirement: pass test or submit course transcript

### Internship Specific Course Requirements

(3 courses; 10.5 quarter units)

An internship credential is required before enrollment into the following three courses. These courses provide initial and ongoing support and training that internship candidates require. Students must also attend and participate in school district's regular workshops and collaborative monthly meetings with intern and both support supervisors (site and university).

EXC 6551 Professional Induction Seminar for the Internship Program (3 quarter units)

The following two courses will be added to the schedule once the intern has completed all Education Specialist coursework detailed below. The seminar is to be taken along side the 45 days of supervised teaching during which a University designated

supervisor along with a district designated supervisor complete a series of observations and evaluations to assess the Intern's teaching competencies.

- DHH 609 Student Teaching Seminar (3 quarter units)
- (Must be taken concurrently with student teaching) DHH 608I Supervised Student Teaching for Interns (Deaf and Hard-of-Hearing) (4.5 quarter units over a 45 day time period)

### Interdisciplinary Core Courses

(3 courses; 13.5 quarter units)

- TED 615 The Foundations of Education
- EXC 620 Supporting Positive Behavior
- TED 621A Language Development Methods in Elementary School

### Core Courses for the Education Specialist: Deaf and Hardof-Hearing Credential

(8 courses; 36 quarter units)

| DHH 600 | Introduction to Bilingual Education of Learners who are  |
|---------|--|
|         | Deaf or Hard-of-Hearing: Theory and Practice             |
| DHH 601 | Signed Language Acquisition and Development              |
| DHH 602 | Written and Spoken Acquisition and Development           |
| DHH 603 | Assessment of Learners who are Deaf or Hard-of-          |
|         | Hearing  |
| DHH 604 | Development of Literacy with Learners who are Deaf or    |
|         | Hard-of-Hearing  |
| DHH 605 | Teaching Deaf Learners with Additional Special Needs     |
| DHH 606 | Curriculum and Instruction in Programs for Deaf and      |
|         | Hard-of-Hearing Learners                                 |
| DHH 607 | Bilingual - Multicultural Education of Deaf and Hard-of- |
|         | Hearing Learners   |
|         | 0  |
|         |  |

As stated in the Internship Specific Course Requirements section above; the following two courses will be added to the schedule once the core courses are complete. This is the final and culminating portion of the program. These units do not count twice but are listed here to demonstrate where they will be completed in the program.

- DHH 609 Student Teaching Seminar (3 quarter units) (Must be taken concurrently with student teaching)
- DHH 608I Supervised Student Teaching for Interns (Deaf and Hard-of-Hearing) (4.5 quarter units over a 45 day time period)

### **Exit Requirements**

- Pass all required coursework with a B average. No grades of D or F are accepted.
- Pass the RICA
- Valid CPR card (Infant, Child, and Adult)
- Certificate of clearance (including fingerprint clearance)
- Letter of recommendation from Master Teacher
- Comprehensive Examination
- Apply for credential and CLAD certificate.

### PROFESSIONAL LEVEL II EDUCATION SPECIALIST CREDENTIALS

In California's credential structure, Professional Level II preparation is intended to enable new teachers to apply their Preliminary Level I preparation to the demands of professional positions while also fostering advanced skills and knowledge. The emphasis of the professional preparation program is to move special educators beyond the functional aspects of teaching to more advanced knowledge and reflective thinking about their roles in providing effective instruction and an environment for student success.

#### Admission Requirements

All applicants for admission must provide National University with the following documents:

- Formal application to the University
- Valid Preliminary Level I Education Specialist Credential
- CTC form CL777.1 from the applicant's employer verifying that the applicant is employed in a full-time special education position
- Verification from the applicant's employer that the current position has a probable duration of two years
- Verification that the student has maintained a minimum of a 2.5 grade point average on a 4.0 scale for graduate work
- All students must complete a credentials packet and be interviewed by a credential advisor within the first 60 days of enrollment.
- All students must enroll in electronic portfolio.

### Recommendation for Professional Level II Education Specialist Credentials

In order to be recommended for a California Professional Level II Education Specialist Credential in Mild/Moderate or Moderate/Severe Disabilities Deaf or Hard-of-Hearing, the student must show:

- A minimum of two years of successful, full-time teaching experience in the public schools or private schools of equivalent status, as verified by the applicant's employer
- Successful completion of the program (coursework and approved non-University activities) for the Professional Level II credential within five years. Students must maintain a 3.0 grade point average.
- Successful completion of the exit process with assigned University supervisor, including examination of electronic portfolio and passing grade on exit exam.
- Submission of any required applications and fees.
- Completion of any needed credential clearing courses. All Professional Level II Education Specialist credential candidates are required to have successfully completed coursework in Level I Educational Technology and Health Education, including valid CPR Certification for Infant, Child and Adult. Candidates will be evaluated for these courses. If these classes have been completed in a Level I program or at another university, the student should meet with an admissions or credential advisor to submit an online equivalency request.

### Scheduling

All courses are scheduled by an advisor. Courses in the Level II program may not be taken concurrently. Instructions for applying for a waiver of EXC 656 are provided in EXC 655A.

Candidates for the Level II Credential must take EXC 655A first and may not begin any of the other Level II courses until EXC 655A is completed. EXC 655B must be taken last.

Candidates in the mild/moderate program may take EXC 656, EXC 657, and EXC 658 in any order. Candidates in the moderate/severe program may take EXC 656, EXC 657, and EXC 659 in any order. Candidates in the deaf and hard-of-hearing program may take EXC 656, EXC 657, and IHD 1203X in any order.

### PROFESSIONAL LEVEL II EDUCATION SPECIALIST:

Mild/Moderate Disabilities (780-358) (5 courses; 18 quarter units)

EXC 655A Professional Induction Seminar (3 quarter units)

| EXC 656  | Best Practices for Special Needs Students                 |  |
|----------|---|--|
|          | (Students may substitute approved non-University          |  |
|          | activities for this class. Only full-time faculty members |  |
|          | may approve course equivalence.)                          |  |
| EXC 657  | Community Resources and Transition                        |  |
| EXC 658  | Advanced Specialization in Mild/Moderate Disabilities     |  |
| EXC 655B | Exit Seminar (Portfolio required)                         |  |

(1.5 quarter units)

Exit Process – Exam

Apply for Mild/Moderate Level II Credential with Credential Advisor

# ■ PROFESSIONAL LEVEL II EDUCATION SPECIALIST:

### Moderate/Severe Disabilities

(780-359)

(5 courses; 18 quarter units)

| EXC 655A<br>EXC 656 | Professional Induction Seminar Plan (3 quarter units)<br>Best Practices for Special Needs Students<br>(Students may substitute approved non-University |
|---------------------|--|
|                     | activities for this class. Only full-time faculty members  |
|                     | may approve the course equivalence.)   |
| EXC 657             | Community Resources and Transition   |
| EXC 659             | Advanced Specialization in Moderate/Severe   |
|                     | Disabilities   |
| EXC 655B            | Exit Seminar (Portfolio required)  |
|                     | (1.5 quarter units)  |

Exit Process – Exam

Apply for Moderate/Severe Level II Credential with Credential Advisor

### ■ PROFESSIONAL LEVEL II EDUCATION SPECIALIST:

### Deaf and Hard-of-Hearing

(780-370)

### **Program Requirements**

(5 courses; 18 quarter units)

| EXC 655A | Professional Induction Seminar (3 quarter units)          |
|----------|---|
| EXC 656  | Best Practices for Special Needs Students                 |
|          | (Students may substitute approved non-University          |
|          | activities for this class. Only full-time faculty members |
|          | may approve the course equivalence.)                      |
|          |   |

EXC 657 Community Resources and Transition

IHD 1203X Facilitating Outcomes: language, Learning, Speech and Listening

EXC 655B Exit Seminar (Portfolio Required) (1.5 quarter units)

Exit Process- Exam

Apply for Deaf and Hard-of-Hearing Level II Credential with Credential Advisor.

## **Certificate Programs**

770)

### Applied Behavioral Analysis

(770-000-903) Faculty Advisor: Bill Matthew • (661) 864-2360 • wmatthew@nu.edu

The five-course sequence in applied behavior analysis is designed to prepare candidates for the national certification examination sponsored by the Behavior Analyst Certification Board. Applicants for the Certification as a Behavior Analyst (ABA) will have to meet additional requirements to qualify. All five ABA courses must be taken from National University in order to earn this Certificate.

Note: Upon successful completion of National University's five course sequence, the candidate will receive a Certificate of Completion from National University. This is NOT professional certification by the Behavioral Analysis Certification Board, Inc. (BACB) and does NOT entitle the candidate to claim that they are certified behavior analysis or Board Certified Behavior Analysts. Candidates must take the national certification exam and apply for the professional certificate.

Candidates who are pursuing the master's degree or a PPS credential in Educational Counseling, School Psychology, or Master of Arts in Teaching may qualify for the Certificate in Behavioral Analysis provided that the candidate requests the certificate prior to the completion of their degree program. This coursework and the accompanying credits may be transferred to appropriate degree programs if all other requirements for admission to a degree program are met.

Candidates who already possess a master's degree may also take the listed coursework to obtain the Certificate in Applied Behavior Analysis. This certificate provides candidates with an overview of some of the most important concepts in behavior analysis.

Prior to qualifying to take the national Board Certified Behavior Analyst exam, candidates must do 1500 hours of Supervised Fieldwork, which is supervised by BACB member. National University does not provide this supervision.

### Requirements

(5 courses; 22.5 quarter units)

- ABA 601 Basic Behavioral Analytic Principles-I Assessment and Research Design
- ABA 602 Basic Behavioral Analytic Principles-II Basic Processes (*Prerequisites: ABA 601*)
   ABA 603 Basic Behavioral Analytic Principles-III: Applications (*Prerequisites: ABA 601, ABA 602*)
   ABA 604 Advanced Applied Behavior Analysis: Application of Behavioral Principles in School Settings
- (Prerequisites: ABA 601, ABA 602, ABA 603)
   ABA 605 Advanced Applied Behavior Analysis: Application of Behavioral Principles in the Technology of Teaching (Prerequisites: ABA 601, ABA 602, ABA 603, ABA 604)

### • Autism Certificate

### (770-000-904)

Lead Faculty: KayDee Caywood • (310) 662-2145 • kcaywood@nu.edu

This certificate is designed for those interested in finding out more about working with and teaching those that fall within the Autism Spectrum Disorder. The four course sequence is designed to provide the student with an orientation to the terms and the characteristics involved, assessment and behavior management interaction strategies, a variety of teaching strategies, and train necessary skills in collaborating with parents and families of those in the spectrum. It is recommended that students complete EXC621 first in the sequence.

Credentialed teachers may add this certificate to enhance their knowledge of teaching those in the field.

Professionals in other fields such as social work, nursing, and child development can also complete the coursework for professional growth units or an NU certificate.

These courses can be applied to the Masters of Arts in Teaching.

### Prerequisites

Completion of a bachelor's degree.

### **Program Requirements**

(4 courses, 18 quarter units)

| EXC621 | Introduction to Students with Autism Spectrum Disorders |
|--------|---|
|        | (ASD)   |

- EXC622 Assessment and Behavioral Applications in Autism EXC623 Evidenced-Based Intervention / Instruction for Students with Autism
- EXC624 Autism: Collaboration with Parents and Families

### • CA Reading Certificate

Lead Faculty: Marilyn Moore • (858)642-8301 • mmoore@nu.edu

The CA Reading Certificate authorizes the holder to assess student reading and provide reading instruction in response to those assessments. Reading Certificate holders are also authorized to develop, implement, and adapt the reading content curriculum and assist classroom teachers in these areas. Holders of the Certificate may perform the above services at one or more school sites at the grade levels authorized by their prerequisite teaching credential.

### **Requirements for the Certificate**

- Hold a bachelor's or master's degree from a regionally accredited college or university with an overall grade point average of 2.5 or better was achieved, or where a grade point average of 2.75 or higher was achieved in the last 90-quarter units.
- Possession of a valid teaching credential.
- Meet with Admission Advisor to enroll in the CA Reading Certificate program.
- Meet with Credential Advisor within 30 days of enrollment to obtain reading certification application procedures. This packet provides detail on the additional requirements for the certificate listed below.
- No coursework is accepted from another university for this program and no substitutions are allowed.

### **Required Courses**

(4 courses; 18 quarter units)

| MAT 645  | Developing Fluency in Reading                          |
|----------|--|
| MAT 646  | Comprehension Strategies and Procedures                |
| MAT 647A | Field Based Language Arts Assessment and Instruction I |
| MAT 647B | Field Study: Language Arts Assessment and Instruction  |
|          | П  |

(Prerequisites: MAT 645, MAT 646 and MAT 647A) (Candidates must maintain a 3.0 GPA. "D" and "F" grades are not accepted.)

Note: At the end of each course, students must have their instructor sign off on the competency verification forms found in the credential packet. These verification forms must be completed before applying for the certificate.

#### Additional Requirements for the Certificate

- Provide verification of three years successful, full-time teaching experience in any grade or subject, preschool through adults. A letter or other appropriate documentation by the candidate's employer may provide verification. Acceptable experience does NOT include student teaching, internship teaching, or teaching while holding an emergency permit. This experience may also be gained outside of California.
- Provide a copy of a teaching credential valid for a minimum of 12 months and have a non-delinquent student account balance
- For each course, provide competency verification forms signed off on by each course instructor
- After successful completion of the required coursework and a completed credential packet, the regional reading certificate coordinator will review the packet for final approval. Once approval is obtained, please see your Credential Advisor to apply to the CTC for the certificate. A valid credit card for the online application fee is required.

### CLAD Certificate

(767) (768) (770-000-767 or 768) Lead Faculty Advisor: Kenneth Fawson • kfawson@natuniv.edu

Previously credentialed teachers who want to become authorized to teach English Language Development and Specially-Designed Academic Instruction delivered in English can earn a CLAD certificate by meeting the state of California requirements.

CLAD certificate classes have been approved as a set by the CTC. No coursework is accepted in transfer from another university for this program and no substitutions are allowed. National University cannot recommend a candidate for a CLAD credential unless all four courses are taken in residence. Students must hold a valid credential to be granted a certificate.

### **Requirements for the Certificate**

(4 courses; 18 quarter units)

To receive a CLAD certificate, students must complete at least 18 quarter units at National University. They must also:

- Possess an appropriate prerequisite credential
- Complete the four courses listed below

### **Required Courses**

(4 courses; 18 quarter units)

To receive a CLAD certificate, students must complete all coursework within seven years with a 3.0 GPA. Grades of "D" and "F" are not accepted.

| TED 615      | Foundations of Education                        |
|--------------|---|
| TED 605      | The Diverse Classroom                           |
| TED 621A     | Language Development Methods for the Elementary |
|              | School  |
|              | (Prerequisite: TED 615)                         |
| or           |   |
| TED 623      | Language Development Methods for Secondary and  |
|              | Middle Schools                                  |
|              | (Prerequisite: TED 615)                         |
| CLD 627      | Methods for Cross-Cultural Instruction *        |
|              | (Prerequisites: TED 615; TED 621A or TED 623)   |
| * Applicable | e only for CLAD certificate.                    |

### Additional Requirements for the Certificate and Application Information

After completing their coursework successfully, students must meet with a credential advisor to complete and submit the California

Commission on Teacher Credentialing application form for the multiple/single subject certificate.

In order to avoid evaluation or scheduling errors, students must meet with a credential advisor within 30 days of enrollment.

### • Early Childhood Education Certificate

(770-741) Lead Faculty Advisor: John Carta-Falsa • (714) 429-5135 • jcartafa@nu.edu (4 courses; 18 quarter units)

- ECE 650 The Early Childhood Teacher
- ECE 651 Promoting Child Development and Learning: TransitionsECE 652 Understanding Young Children: Cognition and the Growing Child
- ECE 653 Effective Teaching Strategies for Young Children

## • Early Childhood Special Education Certificate (770-000-788)

Faculty Advisor: Lucinda Kramer • (714) 429-3132 • lkramer@nu.edu

This certificate is designed for individuals who have completed Level II coursework in special education and hold a Professional Specialist Credential, Mild/Moderate or Moderate/Severe disabilities. Completion of the certificate extends teaching authorization from birth through 22. Although designed for those with credentials in Mild/Moderate or Moderate/Severe disabilities, it can also be added to credentials in Deaf and Hard-of-Hearing, Physical and Health Impairments, and Visual Impairments for professional growth. In addition, persons with Learning, Handicapped, or Severely Handicapped credentials may add this certificate.

Professionals in other fields, such as social work, nursing, and child development can also complete the coursework for professional growth units or a National University certificate.

### Prerequisites

Completion of Level II coursework in either Mild/Moderate, Moderate/Severe Education Specialist credential, Learning, Handicapped or Severely Handicapped credentials and experience in early childhood development with a concentration in infants, toddlers, and preschoolers. Professionals in other fields should schedule an appointment with lead regional faculty in special education for admission.

### **Program Requirements**

(6 courses; 27 quarter units)

- EXC 603 Typical and Atypical Development in Young Children
- EXC 605 Assessment in Young Children
- EXC 606 Family Systems & Partnership
- EXC 607 IFSP Process: Collaboration & Consultation
- EXC 608 Interventions for Young Children with Disabilities
- EXC 609 Field Experience

### Additional Requirements for the Certificate and Application Information

After completing their coursework successfully, students must meet with a credential advisor to complete and submit to the Commission on Teacher Credentialing application for the certificate.

### Educational Technology Certificate

(770-000-778)

(5 courses; 22.5 quarter units)

These courses can be applied to the Master of Science in Educational Technology and include credential clearing courses (EDT 608 and 655).

| EDT 608 | Computer-Based Technology in the Classroom    |
|---------|---|
| EDT 610 | Teaching in the Online and Hybrid Environment |
| EDT 655 | Issues and Trends in Educational Technology   |
| EDT 660 | Multimedia and Interactive Technologies       |
|         |   |

EDT 612 Creating Meaningful Learning with Technology

### National Board Certified Teacher Leadership Certificate

#### (770-897)

Lead Faculty Advisor: Ronarae Adams • (858) 642-8352 • radams@nu.edu

The five course sequence is designed to meet the needs of two groups of teachers:

- For those who want to improve their teaching and prepare themselves to achieve National Board Certification sometime during their career
- For those who are active NBCT candidates and want to earn graduate level credit as they develop the required portfolio in response to submission deadlines

### **Required Courses**

(5 courses; 22.5 quarter units)

| NBC 680 | Measuring and Informing Quality Teaching and<br>Learning: Research, Standards, Portfolio and<br>Assessments                  |
|---------|--|
| NBC 681 | Membership in Learning Communities: Professional<br>Contributions, Colleagueship, Partnerships, and<br>Continuous Growth     |
| NBC 682 | Evidence of Student Learning – Evidence of Student<br>Learning – Entries and Documentation Based on<br>Videotapes            |
| NBC 683 | Evidence of Student Learning – Entries and<br>Documentation Based on Student Work Samples and<br>Knowledge of Subject Matter |
| NBC 639 | Applications of Research for the Art of Teaching<br>Capstone Project: Accomplished Teacher-<br>Leadership Portfolio          |

Dean, **Howard E. Evans** Ph.D., Chemical Engineering Science California Institute of Technology

| Degrees Offered               | 206 |
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The University of Values

## Degree Programs Offered

### **Undergraduate Degrees**

### Bachelor of Science

with Majors in:

Computer Science Construction Engineering Technology Construction Management Design Engineering Technology Information Systems Information Technology Management 

### Minors

Computer Science 🖑 Information Technology Management 🖑 Technology 🖑

### **Transition Programs**

BSCS/MSCS Program BSCS/MSSE Program BSIS/MSEB Program BSIS/MSIS Program BSIS/MSTM Program BSITM/MSTM Program

### **Graduate Degrees**

### Master of Science

with Fields of Study in: Computer Science 🖑 Database Administration Engineering Management 4 with Areas of Specialization in: Enterprise Architecture Lean Six Sigma Project Management 🖑 Supply Chain Management and eLogistics ~ **Environmental Engineering** Homeland Security and Safety Engineering ~<sup>®</sup> Information Systems 🖑 Software Engineering A Systems Engineering with Areas of Specialization in: **Engineering Management** Enterprise Architecture Industrial Engineering Software Engineering Technology Management ~ Wireless Communications

### Certificate Programs

Industrial Engineering Information Technology Management Lean Six Sigma Project Management Security and Safety Engineering Supply Chain Management and eLogistics

<sup>-</sup>⊕ denotes program also offered or partially offered online. Note: Not all online programs or courses are offered in entirety via Internet. Note: Not all courses or programs listed in this catalog are available at every campus.

Various undergraduate minors are available in some degree programs.

FOR FURTHER INFORMATION

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## **Mission Statement**

The mission of the School of Engineering and Technology is to provide women and men with the skills and foundations for lifelong learning and growth to prepare them for careers and advancement in engineering, computing, technology, and related fields. We seek to educate graduates to demonstrate leadership, innovation, and service to the community in a society and economy that is increasingly complex, global in scope, growth oriented, technologically driven, information based, and environmentally sensitive.

# Undergraduate Degrees BACHELOR OF SCIENCE

(620)

### **General Education Program Requirements**

The general education program consists of a minimum of 70.5 quarter units. Of the 70.5 units, students must complete at least 4.5 units at the upper-division level and 4.5 units in diversity enriched coursework. A plus [+] indicates a diversity enriched offering. All undergraduate students working toward any associate or bachelor's degree must meet the University diversity requirement.

National University has general education requirements in the following eight areas:

### AREA A: ENGLISH COMMUNICATION

(Minimum 15 quarter units)

## AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

### AREA C: INFORMATION LITERACY

(Minimum 4.5 quarter units)

### AREA D: ARTS AND HUMANITIES

(Minimum 13.5 quarter units)

### AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(Minimum 13.5 quarter units)

### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(Minimum 6 quarter units required [Note: one science lab is required])

### See General Education section of the catalog for applicable courses.

### AREA G: MODERN LANGUAGE

(Minimum 9 quarter units)

(Students enrolled in a degree program under the School of Engineering and Technology can elect to take general education electives to fulfill this requirement.)

### AREA A-G: GENERAL EDUCATION

(Minimum 4.5 quarter units)

Courses taken to achieve minimum levels of collegiate-level competency in the areas of writing and mathematical concepts and systems do not satisfy any portion of the general education requirement.

### ◆ Major in Computer Science ∽ ®

### (620-201)

Faculty Advisor: Byunggu Yu • (858) 642-8481 • byu@nu.edu

The Bachelor of Science in Computer Science degree program provides a strong technical background for students planning to begin careers upon graduation and for those interested in graduate study in computer science. Degree requirements include courses in object oriented programming, data structures and algorithms, operating systems, computer communication networks, software engineering, and computer architecture, as well as mathematics, statistics, and the natural sciences. The program features a rigorous academic foundation that is complemented by realistic programming assignments. Emphasis is placed on developing both the technical and design skills necessary to begin and enhance an individual's career. Graduates of this program are well prepared for immediate employment in either the computer industry or many other businesses that increasingly rely on computer science.

### **Program Outcomes**

Upon successful completion of this program, students will gain:

- An ability to apply knowledge of computing and mathematics appropriate to the discipline
- An ability to analyze a problem and identify and define the computing requirements appropriate to its solution
- An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
- An ability to function effectively on teams to accomplish a common goal
- An understanding of professional, ethical, and social responsibilities
- An ability to communicate effectively with a range of audiences
- An ability to analyze the impact of computing on individuals, organizations, and society, including ethical, legal, security, and global policy issues
- Recognition of the need for, and an ability to engage in, continuing professional development
- An ability to use current techniques, skills, and tools necessary for computing practice
- An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices
- An ability to apply design and development principles in the construction of software systems of varying complexities.

### **Transition Programs**

Two transition programs are available to students in the Bachelor of Science in Computer Science (BSCS) degree who meet certain requirements as specified below:

### BSCS/ Master of Science in Computer Science (MSCS) Transition Program BSCS/ Master of Science in Software Engineering (MSSE) Transition Program

Students must complete graduate-level coursework taken as part of the BSCS degree with a grade of B or better. This coursework, which counts as electives, will not transfer as graduate-level credit to National University or any other institution as it is part of an undergraduate degree program. Grades earned in graduate level courses will be calculated as part of the student's undergraduate grade point average. Students must be within completing their last six courses in their undergraduate program and have a cumulative GPA of at least a 3.00 to be eligible. Students must apply for and

begin the MSCS or MSSE program within six months after completing their final BSCS course. Students must complete their MSCS or MSSE program within four years with no break exceeding 12 months.

### **BSCS/MSCS** Transition Program

Allows currently enrolled BSCS students to register for two MSCS courses as electives for their BSCS degree. Students can select CSC 610, SEN 620, SEN 621 or SEN 625. The number of courses required to earn an MSCS degree for Transition Program students is reduced from 12 to as few as 10 courses, depending on courses selected and grades earned.

### **BSCS/MSSE** Transition Program

Allows currently enrolled BSCS students to register for two MSSE courses as electives for their BSCS degree. Students can select SEN 621 and one of the following two courses: SEN 620 or SEN 625. The number of courses required to earn an MSSE degree for Transition Program students is reduced from 12 to as few as 10 courses, depending on courses taken and grades earned.

### **Degree Requirements**

To receive a Bachelor of Science in Computer Science, students must complete at least 180 quarter units. 76.5 quarter units must be completed at the upper-division level, and 45, including the senior project courses (CSC 480A and CSC 480B), must be taken in residence at National University. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

#### **General Education Recommendations**

ENG 334A Technical Writing (Prerequisite: ENG 100/101)

### Prerequisites for the Major

(12 courses; 48 quarter units)

Select two sets of courses from the following (each selection must have a lecture and lab course)

| SCI 100  | Survey of Bioscience*  |
|----------|--|
| SCI 100A | Survey of Bioscience Laboratory (1.5 quarter units)*         |
|          | (Prerequisite: SCI 100)                                      |
| SCI 101  | Introduction to Chemistry*                                   |
|          | (Recommended: Prior completion of MTH 204 or MTH             |
|          | 215 or MTH 216A/B)   |
| SCI 101A | Introduction to Chemistry Laboratory* (1.5 quarter           |
|          | units)   |
|          | (Prerequisite: SCI 101)                                      |
| SCI 104  | General Physics*   |
|          | (Prerequisites: two years of high school algebra and MTH 204 |
|          | or 215 or 216A/B)  |
| SCI 104A | General Physics Laboratory (1.5 quarter units)*              |
|          | (Prerequisite: SCI 104)                                      |
| and      |  |
|          |  |
| MTH 215  | College Algebra and Trigonometry*                            |
|          | (Prerequisite: Placement Evaluation)                         |
| CSC 200  | Orientation to Computer Science                              |
| CSC 208  | Calculus for Computer Science I *                            |

```
(Prerequisite: MTH 215)
CSC 209 Calculus for Computer Science II
```

(Prerequisite: CSC 208)

| CSC 220   | Applied Probability and Statistics                 |
|-----------|--|
|           | (Prerequisite: MTH 215)                            |
| CSC 242   | Introduction to Programming Concepts and Methods * |
|           | (Prerequisites: CSC 200, CSC 208)                  |
| CSC 252   | Programming in C++ *                               |
|           | (Prerequisite: CSC 242)                            |
| CSC 262   | Programming in Java *                              |
|           | (Prerequisite: MTH 215)                            |
| *May be u | sed to satisfy a general education requirement.    |
|           | *  |

### **Requirements for the Major**

(17 courses; 73.5 quarter units)

| CSC 300   | Object Oriented Design and Analysis          |  |
|---|--|--|
|   | (Prerequisite: CSC 252)                      |  |
| CSC 310   | Linear Algebra and Matrix Computation        |  |
|   | (Prerequisite: CSC 208)                      |  |
| CSC 331   | Discrete Structures and Logic                |  |
|   | (Prerequisites: CSC 252, CSC 310)            |  |
| CSC 335   | Data Structures and Algorithms               |  |
|   | (Prerequisites: CSC 300 and CSC 331)         |  |
| CSC 338   | Algorithm Design                             |  |
|   | (Prerequisite: CSC 335)                      |  |
| CSC 340   | Digital Logic Design                         |  |
|   | (Prerequisites: CSC 200, CSC 208)            |  |
| CSC 340L  | Digital Logic Design Lab (1.5 quarter units) |  |
|   | (Prerequisite: CSC 340)                      |  |
| CSC 342   | Computer Architecture                        |  |
|   | (Prerequisites: CSC 340 and CSC 340L)        |  |
| CSC 350   | Computer Ethics                              |  |
| CSC 400   | Operating System Theory and Design           |  |
|   | (Prerequisite: CSC 335)                      |  |
| CSC 422   | Database Design                              |  |
|   | (Prerequisite: CSC 300)                      |  |
| CSC 430   | Programming Languages                        |  |
|   | (Prerequisite: CSC 300)                      |  |
| CSC 436   | Computer Communication Networks              |  |
|   | (Prerequisite: CSC 335)                      |  |
|   |  |  |
| Select any two courses from the following list: |  |  |
| 2   |  |  |

| CSC 421 | Compiler Design                                   |
|---------|---|
|         | (Prerequisite: CSC 335)                           |
| CSC 440 | Advanced Programming in Java                      |
|         | (Prerequisite: CSC 262)                           |
| CSC 445 | Wireless Technologies and Application Development |
|         | (Prerequisite: CSC 242 or CSC 262)                |
| CSC 450 | Artificial Intelligence                           |
|         | (Prerequisite: CSC 335)                           |
| CSC 451 | Artificial Intelligence Programming               |
|         | (Prerequisite: CSC 335)                           |
| CSC 452 | Human Computer Interaction                        |
|         | (Prerequisite: CSC 300)                           |
| CSC 454 | Computer Graphics                                 |
|         | (Prerequisite: CSC 310, CSC 335)                  |
| CSC 455 | Game Programming                                  |
|         | (Prerequisite: CSC 454)                           |
| CSC 456 | Advanced Game Programming                         |
|         | (Prerequisite: CSC 455)                           |
|         | •   |

#### Capstone project

| CSC 480A | Computer Science project I                     |
|----------|--|
|          | (Prerequisite: Completion of major coursework) |
| CSC 480B | Computer Science project II                    |
|          | (Prerequisite: CSC 480A)                       |
|          |  |

### ◆ Major in Construction Engineering Technology√<sup>⊕</sup>

#### (620-441)

Faculty Advisor: Thomas Gatton • (858) 642-8484 • tgatton@nu.edu

The Construction Engineering Technology program provides students with a well rounded education in construction principles, and practices in preparation for a career in the construction industry. Upon completion of this degree, students will be prepared for careers such as construction superintendent, field engineer, project manager, project coordinator, facilities engineer, cost estimator, CAD drafter, and quality and safety controller. Additionally, graduates of this program with experience, interest, and/or knowledge about specific construction trades, will be capable of performing in a large number of positions within those respective subcontracting firms.

### **Program Outcomes**

Students who have successfully completed this program will be able to:

- Effectively communicate through written, verbal, and graphical media.
- Demonstrate knowledge of engineering science and mathematics and its application in problem solving.
- Understand the structural applications and analysis of construction systems and materials.
- Recognize ethical issues and apply professional standards in decision-making.
- Utilize appropriate computer tools to analyze and solve engineering problems.
- Apply modern methods for surveying and metrics.
- Exhibit a fundamental understanding of building mechanical and electrical systems.
- · Demonstrate cost estimating and scheduling techniques.
- Integrate and apply field inspection techniques to meet safety standards.
- Understand and apply the principles of project management and control.
- Work effectively in a team environment.

### **Degree Requirements**

To receive a Bachelor of Science in Construction Engineering Technology, students must complete at least 180 quarter units, 76.5 of which must be completed at the upper-division level and 45 of which must be taken in residence, including the research project classes. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

### Prerequisites for the Major

(8 courses; 30 quarter units)

| SCI 101  | Introduction to Chemistry*                                   |
|----------|--|
|          | (Recommended: Prior completion of MTH 204 or MTH             |
|          | 215 or MTH 216A/B)   |
| SCI 101A | Introduction to Chemistry Laboratory* (1.5 quarter units)    |
|          |  |
|          | (Prerequisite: SCI 101)                                      |
| MTH 210  | Introduction to Probability and Statistics*                  |
|          | (Prerequisite: Placement evaluation)                         |
| SCI 104  | General Physics*   |
|          | (Prerequisites: two years of high school algebra and MTH 204 |
|          | or 215 or 216A/B)  |
|          |  |

| SCI 104A   | General Physics Laboratory (1.5 quarter units)*     |
|------------|---|
|            | (Prerequisite: SCI 104)                             |
| CSC 208    | Calculus for Computer Science I*                    |
|            | (Prerequisite: MTH 215)                             |
| EGR 301    | Engineering Mathematics (Cross-listed with CSC 310) |
|            | (Prerequisite: MTH 215)                             |
| EGR 304    | Statics and Strength of Materials                   |
|            | (Prerequisite: EGR 301)                             |
| *May be us | sed to satisfy a general education requirement.     |

### **Requirements for the Major**

(17courses, 76.5 quarter units)

|         | , <u>i</u>  |
|---------|---|
| EGR 307 | Introduction to Software, Engineering and Ethics                                  |
| EGR 310 | Engineering Economics   |
|         | (Prerequisite: MTH 215)   |
| EGR 313 | Electrical Circuits and Systems   |
|         | (Prerequisite: MTH 215)   |
| EGR 316 | Legal Aspects of Engineering  |
| EGR 319 | Introduction to Engineering Graphics and Auto CAD ( <i>Prerequisite: MTH</i> 215) |
| DEN 408 | Computer Aided Engineering I: Simulation Modeling and Analysis                    |
|         | (Prerequisite: EGR 319)   |
| CEN 320 | Surveying, Metrics and GIS  |
|         | (Prerequisite: EGR 319)   |
| CEN 323 | Structural Analysis   |
|         | (Prerequisites: EGR 301 and EGR 304)  |
| CEN 410 | Construction Materials and Methods  |
|         | (Prerequisite: MTH 215)   |
| CEN 413 | Plans and Specifications  |
|         | (Prerequisite: EGR 319)   |
| CEN 416 | Mechanical and Electrical Systems   |
|         | (Prerequisite: MTH 215)   |
| CEN 419 | Estimating, Scheduling and Control  |
|         | (Prerequisite: CEN 410)   |
| CEN 420 | Estimating, Scheduling and Control II   |
|         | (Prerequisite: CEN 419)   |
| CEN 422 | Field Inspection and Safety   |
|         | (Prerequisite: CEN 410)   |
|         |   |

EGR 440 Project Management Fundamentals (Prerequisite: EGR 307)

### **Engineering Senior Project**

EGR 486A Engineering Senior Project I (Prerequisite: Completion of 12 BSCET or 14 BSDET core courses) EGR 486B Engineering Senior Project II (Prerequisite: EGR 486A)

### Major in Construction Management <sup>A</sup>

### (620-446)

Faculty Advisor: Thomas M. Gatton • (858) 642-8484 • tgatton@nu.edu

This program fills a pressing need in the construction industry for individuals to conduct and manage activities within the construction industry. It has been developed with significant industry guidance and assistance. The Industry experts are aware that there has been substantial growth in this industry, causing a shortage of individuals with the proper training due to a lack of alignment of academic programs and industry needs.

The purpose of the Bachelor of Science in Construction Management program is to provide students with a well-rounded education in written and verbal communication, technical construction fundamentals, mathematics, business, law, humanities, fine arts, and social, behavioral and natural sciences that will prepare them for a

career at management, administrative, and ownership positions in the construction industry. This degree program will prepare the student for careers such as construction executive, project manager, project engineer/coordinator, field engineer, planning/scheduling engineer, cost engineer, cost estimator, quality and safety controller, construction superintendent, CAD drafter, and facilities engineer. Additionally, graduates with experience, interest, and/or knowledge about specific construction trades will be capable of performing in a large number of management and administrative positions within respective subcontracting companies, including trades such as carpentry, excavation, concrete work, plumbing, structural steel, cabinetry, roofing, insulation, drywall, electrical, HVAC, and landscaping.

### **Program Outcomes**

The specific outcomes for the Bachelor of Science in Construction Management are based on industry standards and related degree programs. Upon completion of this program, graduates will be able to:

- Effectively communicate through written, verbal, and graphical media.
- Demonstrate knowledge of engineering science and mathematics and its application in problem solving.
- Understand the structural applications and analysis of construction systems and materials.
- Recognize ethical issues and apply professional standards in decision-making.
- Utilize appropriate computer tools to analyze and solve engineering problems.
- Apply modern methods for surveying and metrics.
- Exhibit a fundamental understanding of building mechanical and electrical systems.
- · Demonstrate cost estimating and scheduling techniques.
- Integrate and apply field inspection techniques to meet safety standards.
- Understand and apply the principles of project management and control.
- Apply construction accounting principles and analyze financial reports.
- Understand the legal aspects of construction contracting.
- Assess conflict and identify resolution strategies.
- Work effectively in a team environment.

### **Degree Requirements**

To receive a Bachelor of Science in Construction Management, students must complete at least 183 units as articulated below, 76.5 of which must be completed at the upper-division level and 45 of which must be completed in residence at National University. The following courses are specific degree requirements. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree.

Students are expected to possess or have access to a computer and Internet connection including an e-mail account outside of National University for course projects and assignments. Refer to the section on undergraduate admission procedures for specific information regarding application and evaluation.

### Preparation for the Major

(11 courses; 46.5 quarter units)

| COM 200 | Effective Communication*                    |
|---------|---|
| MTH 210 | Introduction to Probability and Statistics* |

- (Prerequisite: Placement Evaluation)
- MTH 215 College Algebra and Trigonometry\* (Prerequisite: Placement Evaluation)

| ILR 260  | Information Literacy and Report Writing*                     |
|----------|--|
|          | (Prerequisite: ENG 100/101)                                  |
| ECO 204  | Principles of Macroeconomics*                                |
| ECO 203  | Principles of Microeconomics*                                |
| PSY 100  | Introduction to Psychology*                                  |
| SCI 104  | General Physics*   |
|          | (Prerequisites: two years of high school algebra and MTH 204 |
|          | or 215 or 216A/B)  |
| SCI 104A | General Physics Laboratory (1.5 quarter units)*              |
|          | (Prerequisite: SCI 104)                                      |
| ACC 201  | Financial Accounting Fundamentals                            |

- CIS 425 Programming for Information Technology Environment
- \*May be used to satisfy a general education requirement.

### **Requirements for the Major**

(24 courses; 108 quarter units)

| COM 422                    | Technical Writing and Presentation                         |  |
|----------------------------|--|--|
|                            | (Prerequisite: ENG 334A)                                   |  |
| HUB 401                    | Conflict Resolution  |  |
|                            | (Prerequisite: ENG 100/101, PSY 100)                       |  |
| MGT 409C                   | Principles of Management and Organization                  |  |
| EGR 301                    | Engineering Mathematics                                    |  |
|                            | (Prerequisite: MTH 215)                                    |  |
| EGR 304                    | Statics and Strength of Materials                          |  |
| ECD 207                    | (Prerequisite: EGR 301)                                    |  |
| EGR 307                    | Introduction to Software, Engineering, and Ethics          |  |
| EGR 310                    | Engineering Economics                                      |  |
| EGR 313                    | (Prerequisite: MTH 215)<br>Electrical Circuits and Systems |  |
| EGK 515                    | (Prerequisite: MTH 215)                                    |  |
| EGR 316                    | Legal Aspects of Engineering                               |  |
| EGR 319                    | Introduction to Engineering Graphics and Auto CAD          |  |
| LOROIT                     | (Prerequisite: MTH 215)                                    |  |
| DEN 408                    | Computer Aided Engineering I: Simulation Modeling          |  |
|                            | and Analysis   |  |
|                            | (Prerequisite: EGR 319)                                    |  |
| CEN 320                    | Surveying, Metrics, and GIS                                |  |
|                            | (Prerequisite: EGR 319)                                    |  |
| CEN 323                    | Structural Analysis  |  |
|                            | (Prerequisites: EGR 301 and EGR 304)                       |  |
| CEN 410                    | Construction Materials and Methods                         |  |
|                            | (Prerequisite: MTH 215)                                    |  |
| CEN 413                    | Plans and Specifications                                   |  |
|                            | (Prerequisite: EGR 319)                                    |  |
| CEN 416                    | Mechanical and Electrical Systems                          |  |
|                            | (Prerequisite: MTH 215)                                    |  |
| CEN 419                    | Estimating, Scheduling, and Control                        |  |
| CEN 420                    | (Prerequisite: CEN 410)                                    |  |
| CEN 420<br>CEN 421         | Estimating, Scheduling, and Control II                     |  |
| CEN 421<br>CEN 422         | Construction Accounting, Finance and Law                   |  |
| CEIN 422                   | Field Inspection and Safety<br>(Prerequisite: CEN 410)     |  |
| CEN 425                    | Design and Construction Process Integration                |  |
| EGR 440                    | Project Management Fundamentals                            |  |
| 2011110                    | (Prerequisite: EGR 307)                                    |  |
|                            |  |  |
| Engineering Senior Project |  |  |

EGR 486A Engineering Senior Project I (*Prerequisite: Completion of 12 BSCET or 14 BSDET major courses*) EGR 486B Engineering Senior Project II

(Prerequisite: EGR 486A)

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### ◆ Major in Design Engineering Technology∽<sup>⊕</sup>

(620-442)

Faculty Advisor: Thomas M. Gatton • (858) 642-8484 • tgatton@nu.edu

The Bachelor of Science in Design Engineering Technology provides students with the theoretical foundations, hands-on experience, and teaming skills required for effective conceptual, logistical, developmental, and interdisciplinary design of complex engineering devices, product life cycles, and engineering systems through integration of state-of-the-art computer-aided tools, concurrent engineering standards, and simulation modeling techniques.

Upon completion of this degree, students will be prepared to hold positions such as system design engineer, design supervisor for engineering projects, and product design engineer. The program blends together professional components from the traditional engineering curricula with the practical aspects of programming applications, engineering project management standards, and simulation modeling techniques. It also combines knowledge and practices needed for professionals working on engineering projects that require innovative and interdisciplinary background, skills, and experience.

### **Program Outcomes**

After completion of this program, graduates will be able to:

- Combine knowledge and practices needed for working on engineering projects that require innovative and interdisciplinary background, skills, and experience.
- Utilize product design optimization concepts in different engineering applications.
- Integrate software and hardware components by applying the state-of-the-art computer-aided engineering tools and engineering graphics techniques and methodologies.
- Understand practical aspects of programming applications for solving diversified engineering problems.
- Apply contemporary simulation and modeling techniques for enhancement of engineering design.
- Integrate engineering project management standards for efficient and competitive design of engineering products and processes.
- Understand major concepts of design and analysis of engineering experiments.
- Study and implement the concept of reliability engineering.
- Analyze human factors, ergonomics, and safety issues as part of the requirements for design of engineering systems, products, and services.
- Demonstrate knowledge of computer aided engineering tools including ProEngineer Modeling Software, LabVIEW Graphical Programming, AutoCAD 2002, 3-D Visualization Software with MATLAB, and SolidWorks 3-D Mechanical Design Software.

### **Degree Requirements**

To receive a Bachelor Science in Design Engineering Technology, students must complete at least 180 quarter units, 76.5 of which must be completed at the upper-division level and 45 of which must be taken in residence, including the research project classes. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

#### Prerequisites for the Major

(8 courses; 30 quarter units)

| SCI 101   | Introduction to Chemistry*                                   |
|-----------|--|
|           | (Recommended: Prior completion of MTH 204 or MTH             |
|           | 215 or MTH 216A/B)   |
| SCI 101A  | Introduction to Chemistry Laboratory* (1.5 quarter           |
|           | units)   |
|           | (Prerequisite: SCI 101)                                      |
| MTH 210   | Introduction to Probability and Statistics*                  |
|           | (Prerequisite: placement evaluation)                         |
| SCI 104   | General Physics*   |
|           | (Prerequisites: two years of high school algebra and MTH 204 |
|           | or 215 or 216A/B)  |
| SCI 104A  | General Physics Laboratory (1.5 quarter units)*              |
|           | (Prerequisite: SCI 104)                                      |
| CSC 208   | Calculus for Computer Science I *                            |
|           | (Prerequisite: MTH 215)                                      |
| EGR 301   | Engineering Mathematics (Cross-listed with CSC 310)          |
|           | (Prerequisite: MTH 215)                                      |
| EGR 304   | Statics and Strength of Materials                            |
|           | (Prerequisite: EGR 301)                                      |
| *May be u | sed to satisfy a general education requirement.              |

### **Requirements for the Major**

(18 courses; 81 quarter units)

| EGR 307 | Introduction to Software, Engineering and Ethics    |
|---------|---|
| EGR 310 | Engineering Economics                               |
|         | (Prerequisite: MTH 215)                             |
| EGR 313 | Electrical Circuits and Systems                     |
|         | (Prerequisite: MTH 215)                             |
| EGR 316 | Legal Aspects of Engineering                        |
| EGR 319 | Introduction to Engineering Graphics and Auto CAD   |
|         | (Prerequisite: MTH 215)                             |
| DEN 408 | Computer Aided Engineering I: Simulation Modeling   |
|         | and Analysis  |
|         | (Prerequisite: EGR 319)                             |
| DEN 411 | Computer Aided Engineering II: ProEngineer Modeling |
|         | Software  |
|         | (Prerequisite: EGR 319)                             |
| DEN 414 | Computer Aided Engineering III: LabVIEW Graphical   |
|         | Programming   |
|         | (Prerequisite: EGR 319)                             |
| DEN 417 | Computer Aided Engineering IV: Graphics and GUI     |
|         | with MATLAB   |
|         | (Prerequisite: EGR 319)                             |
| DEN 420 | Computer Aided Engineering V: SolidWorks 3D         |
|         | Mechanical Design Tools                             |
|         | (Prerequisite: EGR 319)                             |
| DEN 423 | Human Factors in Engineering and Design             |
| DEN 426 | Reliability Engineering                             |
|         | (Prerequisite: MTH 215)                             |
| DEN 429 | Product Design Optimization                         |
|         | (Prerequisite: MTH 215)                             |
| DEN 432 | Concurrent Design of Products, Manufacturing        |
|         | Processes and Systems                               |
|         | (Prerequisites: MTH 210 and EGR 307)                |
| DEN 435 | Design and Analysis of Experiments                  |
| EGR 440 | Project Management Fundamentals                     |
|         | (Prerequisite: EGR 307)                             |
|         |   |

### **Engineering Senior Project**

- EGR 486A
   Engineering Senior Project I (Prerequisite: Completion of 12 BSCET or 14 BSDET major courses)

   EGR 486B
   Engineering Senior Project II
- (Prerequisite: EGR 486A)

## ◆ Major in Information Systems ~ ⊕

(620-415)

Faculty Advisor: Albert Cruz • (858) 642-8477 • acruz@nu.edu

The Bachelor of Science in Information Systems (BSIS) program links business and technology, and there is great demand in the corporate world for people who can integrate all elements of the enterprise into a comprehensive network of responsive, proactive information delivery systems. Information systems have become increasingly important in fields such as healthcare and criminal justice. The BSIS program includes: data communications, systems analysis, system development, database administration, project management, computer forensics, health information management, and quality/information assurance.

### **Program Outcomes**

Upon successful completion of this program, students will be able to:

- Demonstrate both understanding and implementation of information systems technologies.
- Demonstrate skills necessary to anticipate and assess the potential commercial impact of specific information systems technologies.
- Explore, develop, and implement systems planning, design, and integration of information systems technology in the competitive environment.
- Plan and design corporate communications infrastructure and networking topology.
- Identify and improve strategic corporate information management procedures.
- Focus on their areas of specialization and implement their ideas within an organization.
- Devise innovative and more efficient solutions to solve business problems.
- Communicate effectively about the program subject matter both in written and oral form.

### **Transition Programs**

Three transition programs are available to students in the BSIS degree who meet certain requirements as specified below:

### BSIS/ Master of Science in Information Systems (MSIS) Transition Program BSIS/ Master of Science in Technology Management (MSTM) Transition Program BSIS/Master of Science in Electronic Business (MSEB) Transition Program

Students must complete graduate-level coursework taken as part of the BSIS degree with a grade of B or better. This coursework, which counts as electives, will not transfer as graduate-level credit to National University or any other institution as it is part of an undergraduate degree program. Grades earned in graduate level courses will be calculated as part of the student's undergraduate grade point average. Students must be within completing their last six courses in their undergraduate program and have a cumulative GPA of at least a 3.00 to be eligible. Students must apply for and begin the MSIS or MSTM program within six months after completing their final BSIS course. Students must complete their MSIS, MSEB, or MSTM program within four years with no break exceeding 12 months.

### **BSIS/MSEB** Transition Program

Allows currently enrolled BSIS students to register for two MSEB

courses as electives for their BSIS degree. Students can select ELB 620 and any one of the following two courses: ELB 621 or ELB 624. The number of courses required to earn an MSEB degree for Transition Program students is reduced from 12 to 10 courses, depending on courses selected and grades earned.

### **BSIS/MSIS** Transition Program

Allows currently enrolled BSIS students to register for two MSIS courses as electives for their BSIS degree. Students can select CIS 601 and any one of the following two courses: CIS 602 or CIS 603. The number of courses required to earn an MSIS degree for Transition Program students is reduced from 12 to 10 courses, depending on courses selected and grades earned.

### **BSIS/MSTM** Transition Program

Allows currently enrolled BSIS students to register for two MSTM courses as electives for their BSIS degree. Students can select any two of the following three courses: TMG 620, TMG 605, or TMG 603. The number of courses required to earn an MSTM degree for Transition Program students is reduced from 12 to 10 courses, depending on courses taken and grades earned.

### **Degree Requirements**

To receive a Bachelor of Science in Information Systems, students must complete at least 180 quarter units, 76.5 of which must be completed at the upper division level and 45, including the senior project courses, must be taken in residence at National University. In the absence of transfer credit students may need to take general electives to meet overall unit requirements for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

### Preparation for the Major

Students should be computer literate and have a basic understanding of computer usage.

### **Requirements for the Major**

(14 courses; 63 quarter units)

| CIS 301  | Management Information Systems                              |
|----------|---|
| CIS 310  | Technology Project Management                               |
| CIS 320  | Systems Analysis and Integration                            |
| CIS 330  | System Development  |
| CIS 340  | Data Communications   |
| CIS 350  | Database Management Systems                                 |
| CIS 416  | Database Administration                                     |
|          | (Prerequisite CIS 340)                                      |
| CIS 425  | Programming for an Information Technology                   |
|          | Environment   |
| CIS 430  | Web and E-Business Design and Development                   |
| CIS 440  | Systems Quality Assurance                                   |
| CIS 450  | Information and Systems Assurance                           |
| CIS 460  | Human Factors and Ergonomic Design                          |
| CIS 420A | Information Systems and Technology Project I                |
|          | (Prerequisite: CIS 310 – Technology Project Management, and |
|          | 80 percent of courses in the major, except CIS 420B)        |
| CIS 420B | Information Systems and Technology Project II               |
|          | (Prerequisite: CIS 420A)                                    |
|          |   |

### **Upper-Division Electives**

(2 courses; 9 quarter units)

Select two courses from the following list:

- CIS 470 Computer Forensics
- CIS 480 Health Information Management
- ITM 434 Wireless Local Area Network (WLAN) Administration

| ITM 435 | Wireless Local Area Network (WLAN) Security |
|---------|---|
|         | (Prerequisite: ITM 434)                     |
| ITM 470 | Information Security Management             |
|         |   |

ITM 475 Information Security Technologies (Prerequisite: ITM 470)

## Major in Information Technology Management<sup>®</sup>

### (620 - 408)

Faculty Advisor: John Bugado • (858) 642-8407 • jbugado@nu.edu

The Bachelor of Science in Information Technology Management (BSITM) program is designed to meet the increasing demand for technology expertise in consulting, marketing and sales support, customer services and support, information and library science, and general management. This program is designed to provide students with understanding of basic information technology management concepts and practical technology skills. Graduates are prepared for positions in the areas of (1) Information Desktop Management and Administration, (2) Database Management Systems (DBMS) Development, Administration and Support, (3) Network Management and Support.

### Program Outcomes

Upon successful completion of this program, students will be able to:

- · Operate a personal computer with skills required to adjust easily to the future changes in hardware and software.
- Use a variety of computer applications relevant to the business/organization needs, including operating systems, word processing, databases, spreadsheets, graphics, and telecommunications.
- Apply theory of information technology management to the business/organization environment and adapt to future changes in technology.
- Recognize of a wide-range of information desktop management and their appropriate computer application as related to the business/organization needs.
- Manage and support business/organization networking environment.
- Design, develop, administer, and support a robust database management system (DBMS) for the changing business/organization needs.

Two transition programs are available to students in the BSITM degree who meet certain requirements as specified below:

### BSITM/ Master of Science in Technology Management (MSTM) Transition Program BSITM/Master of Science in Electronic Business (MSEB) Transition program

Students must complete graduate-level coursework taken as part of the BSITM degree with a grade of B or better. This coursework, which counts as electives, will not transfer as graduate-level credit to National University or any other institution as it is part of an undergraduate degree program. Grades earned in graduate level courses will be calculated as part of the student's undergraduate grade point average. Students must be within completing their last six courses in their undergraduate program and have a cumulative GPA of at least a 3.00 to be eligible. Students must apply for and begin the MSEB or MSTM program within six months after completing their final BSITM course. Students must complete their MSEB or MSTM program within four years with no break exceeding 12 months.

### **BSITM/MSEB** Transition Program

Allows currently enrolled BSITM students to register for two MSEB courses as electives for their BSITM degree. Students can select ELB620 and any one of the following two courses: ELB621 or ELB624. The number of courses required to earn an MSEB degree for Transition Program students is reduced from 12 to 10 courses, depending on courses selected and grades earned.

### BSITM/MSTM Transition Program

Allows currently enrolled BSITM students to register for two MSTM courses as electives for their BSITM degree. Students can select any two of the following three courses: TMG620, TMG605, or TMG603. The number of courses required to earn an MSTM degree for Transition Program students is reduced from 12 to 10 courses, depending on courses taken and grades earned.

### **Degree Requirements**

To receive a Bachelor of Science in Information Technology Management, students must complete at least 180 quarter units, 76.5 of which must be completed at the upper-division level and 45 of which must be taken in residence, including the capstone project classes (ITM 490 A/B). In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

### Prerequisites for the Major

(4 courses; 18 quarter units)

Students should be computer literate and have a basic understanding of computer usage.

- ITM 200 Computer Hardware, Software, Maintenance and Support ITM 205
- Office Productivity Software Applications
- ITM 210 Introduction to Information Technology
- ITM 230 Computer Network Technologies Overview

### Requirements for the Major

(14 courses; 63 quarter units)

| ITM 320  | Information Technology Management                         |
|----------|---|
|          | (Prerequisite: ITM 210)                                   |
| ITM 340  | IT Client Environment Using Windows                       |
| ITM 345  | IT Server Environment Using Linux                         |
| ITM 350  | Desktop Applications Support and Troubleshooting          |
|          | (Prerequisite: ITM 205)                                   |
| ITM 420  | Local Area Networks                                       |
| ITM 430  | Wide Area Networks  |
|          | (Prerequisite: ITM 420)                                   |
| ITM 434  | Wireless Local Area Network (WLAN) Administration         |
| ITM 435  | Wireless Local Area Network (WLAN) Security               |
|          | (Prerequisite: ITM 434)                                   |
| ITM 440  | Database Systems Concepts and Data Modeling               |
| ITM 450  | Database Processing and Administration                    |
|          | (Prerequisite: ITM 440)                                   |
| ITM 470  | Information Security Management                           |
| ITM 475  | Information Security Technologies                         |
|          | (Prerequisite: ITM 470)                                   |
| ITM 490A | Information Technology Project I                          |
|          | (Prerequisite: 10 of the ITM courses must be successfully |
|          | completed)  |
| ITM 490B | Information Technology Project II                         |

(Prerequisite: ITM 490A)

### **Upper-Division Electives**

(2 courses; 9 quarter units)

Students can choose any approved upper-division degree related electives from the School of Business and Management or the School of Engineering and Technology. Students who are eligible and enroll in a transition program should take transition program classes as their electives.

## School of Engineering and Technology Minors

### • Minor in Computer Science

(460)

### **Requirements for the Minor**

(6 courses; 27 quarter units)

Students can complete a minor in computer science to fulfill requirements for a bachelor's degree with a major other than computer science. Prior to enrolling in the minor, students must complete the prerequisite courses listed below or waive them through challenge exams.

### Prerequisites for the Minor

(5 courses; 22.5 quarter units)

| MTH 215 | College Algebra and Trigonometry     |
|---------|--------------------------------------|
|         | (Prerequisite: Placement Evaluation) |

- CSC 200 Orientation to Computer Science
- CSC 208 Calculus for Computer Science I (Cross-listed with MTH 220) (Prerequisite: MTH 215)
- CSC 242 Introduction to Programming Concepts and Methods (*Prerequisite: CSC 200, CSC 208*) CSC 252 Programming in C++ (*Prerequisite: CSC 242*)

### **Requirements for the Minor**

(6 courses; 27 quarter units)

| CSC 300 | Object Oriented Design and Analysis                  |
|---------|--|
|         | (Prerequisite: CSC 252)                              |
| CSC 331 | Discrete Structures and Logic (Cross-listed with MTH |
|         | 325)   |
|         | (Prerequisite: CSC 252, CSC 310)                     |
| CSC 335 | Data Structures and Algorithms                       |
|         | (Prerequisite: CSC 300, CSC 331)                     |
| CSC 340 | Digital Logic Design                                 |
|         | (Prerequisite: CSC 200, CSC 208)                     |

Choose two upper-division level Computer Science (CSC) courses provided that all required prerequisites have been met. Students may not take CSC 480A/B.

### Minor in Information Technology

Management<sup>®</sup>(462)

### **Requirements for the Minor**

(6 courses; 27 quarter units)

A minor in information technology management is available to students in any bachelor's degree program other than the BS in information technology management. To fulfill the requirements for the minor, students can take any six courses listed as upperdivision requirements for the major and beginning with ITM prefixes. See Bachelor of Science in Information Technology Management section. Prerequisites may be required.

### Minor in Technology<sup>®</sup>

#### (461) Requirements for the Minor

(6 courses; 27 quarter units)

To constitute a technology minor, students must select any six upper-division courses from the following technology areas. All prerequisites must be met for courses selected.

- Information Technology Management (ITM)
- Information Systems (CIS )

## **Graduate Degrees**

## ■ MASTER OF SCIENCE IN COMPUTER SCIENCE<sup>√</sup>

(720-609)

Faculty Advisor: Pradip Peter Dey • (858) 642-8486 • pdey@nu.edu

The Master of Science in Computer Science (MSCS) program provides students with the mathematical foundations and information processing skills required for solving real world problems.

National University's MSCS program not only prepares students in the theoretical and practical aspects of solving complex computing problems but also it develops other essential communication skills. MSCS graduates are able to clearly discuss issues and answers with both technical and non-technical audiences. In addition to those communication skills, every part of the curriculum develops "people skills," ethics, and standards of professionalism.

The curriculum is built upon mathematical foundations, programming techniques, and problem solving skills. The unique combination of these skills enables graduates of National's MSCS program to be of immediate benefit in the computing industry. The rigorous mathematical foundations of the MSCS program have four primary goals: (1) to provide a clear understanding of scope and limitations of computational models, (2) to facilitate acquisition of skills in subsequent courses of the program, (3) to facilitate logical discussion of concepts underlying problem solving skills, and (4) to facilitate acquisition and employment of new skills required by the introduction of new technology. National University's approach to teaching in the MSCS program allows graduates to immediately become highly productive members of a real-world computing team.

The MSCS curriculum provides models of computation that remain appropriate over long periods of time. The foundation courses equip students from a wide variety of backgrounds with the essential and necessary tools to be successful in the computing industry.

### Skill Courses

This set of courses is designed for acquisition of marketable skills. They reflect the demands in the computer industry:

- Analysis, modeling, design, and development
- Computational tools and processes
- Operating Systems and Languages
- Data Base Systems
- Applications Systems and Graphical User Interfaces

- Artificial Intelligence
- Computational Problem Solving

### Integration

The capstone project class is an integrating mechanism to provide realistic experience for the student. It is a three-month project solving a real problem for a real client against a time deadline using all available tools and resources as students work together in teams. This component addresses the need to integrate a broad range of technologies and skills. Students are given the opportunity to crystallize the ideas learned earlier and to implement comprehensive systems across an organization.

### **Career Tracks**

In the MSCS program, graduates are proficient in analytical and critical thinking skills, have a sense of professionalism, and are instilled with a strong set of values essential for success in computer science. This program reflects current and future industry needs, and graduates are trained and prepared to assume a leadership role in the field.

### **Program Outcomes**

Upon completion of this program, students will be able to:

- Construct a computational model for a given problem that allows examination of consequences
- Prove that the model is correct
- Describe properties of computational models
- Describe programming principles such as abstraction, encapsulation, and localization
- Analyze a computational problem and produce a requirements analysis specification of the problem
- Given a problem, develop a use-case analysis of the problem
- Apply computational principles such as abstraction, encapsulation, localization to real world problems
- Apply programming models such as Object Oriented Programming, Structured Programming to develop a programming solution
- Apply design tools for designing a computational system
- Apply CASE tools to develop a computational solution to a problem
- Develop a software system based on a given design and requirements

### Admission Requirements

Candidates seeking admission to the program should possess a baccalaureate degree in Computer Science (CS) or a closely related area. Non-CS students should fulfill the program prerequisites either through additional equivalent coursework or waiver through a course challenge exam.

### **MSCS Transition Program**

National University students who completed a transition program as part of their undergraduate degree and who satisfy MSCS transition program requirements described in the catalog description of various undergraduate programs must complete a minimum of 45 quarter units for their MSCS degree. The number of units required for the MSCS program is dependent on the coursework completed in the Bachelors transition program and the grades earned.

### **Degree Requirements**

(20 courses; 90 quarter units)

The MSCS program requires the completion of 54 quarter units of graduate coursework. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another accredited institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. The degree program consists of ten courses plus the two-part MSCS graduate project (two courses, 4.5 quarter units each) that cannot be taken until all other courses have been completed.

### **Program Prerequisites**

(8 courses; 36 quarter units)

Students with non-computer baccalaureate degrees can qualify for admission to the program by choosing one or a combination of the following options:

Complete the following prerequisites:

| MTH 215 | College Algebra and Trigonometry                 |
|---------|--|
|         | (Prerequisite: Placement Evaluation)             |
| CSC 208 | Calculus for Computer Science I                  |
|         | (Prerequisite: MTH 215)                          |
| CSC 331 | Discrete Structures and Logic                    |
|         | (Prerequisite: CSC 252, CSC 310)                 |
| CSC 242 | Introduction to Programming Concepts and Methods |
|         | (Prerequisite: CSC200, CSC208)                   |
| CSC 252 | Programming in C++                               |
|         | (Prerequisite: CSC 242)                          |
| CSC 300 | Object Oriented Design and Analysis              |
|         | (Prerequisite: CSC 252)                          |
| CSC 335 | Data Structures and Algorithms                   |
|         | (Prerequisite: CSC 300, CSC 331)                 |
| CSC 422 | Principles of Data Base Design                   |
|         | (Prerequisite: CSC 300)                          |
|         |  |

### or

Gain permission of the lead faculty of the MSCS program based on equivalent coursework supported by verifiable documented proof.

### **Core Requirements**

(12 courses; 54 quarter units)

Students are encouraged to take the following 12 courses in the order listed.

| CSC 610 | Mathematical Foundations                                |
|---------|---|
| SEN 620 | Principles of Software Engineering                      |
| SEN 621 | Software Tools and Processes                            |
| SEN 625 | Software Architecture Theory and Practice               |
| CSC 630 | Operating Systems                                       |
| CSC 640 | Database Systems  |
| CSC 650 | Programming Languages                                   |
|         | (Prerequisite: CSC 610 or permission of the instructor) |
| CSC 655 | Compilers and Interpreters                              |
|         | (Prerequisite: CSC 610 or permission of the instructor) |
| CSC 660 | Artificial Intelligence                                 |
|         | (Prerequisite: CSC 610 or permission of the instructor) |
| CSC 670 | User Interface Engineering                              |
|         | (Prerequisite: CSC 610, SEN 620, CSC 630, CSC 650 or    |
|         | permission of the instructor)                           |
| CSC 686 | Computer Science Project I                              |
|         | (Prerequisites: All core requirements)                  |
| CSC 687 | Computer Science Project II                             |
|         | (Prerequisite: CSC 686)                                 |

### ■ MASTER OF SCIENCE IN DATABASE ADMINISTRATION DEGREE

(720-831)

Faculty Advisor: John Bugado • (858) 642-8407 • jbugado@nu.edu

The Master of Science in Database Administration (MSDBA) program provides students with a solid foundation in the fundamental skills of database theory, modeling, implementation, administration, and management. This exposes them to best practice methodologies using a variety of tools including abstract thought, strategic managerial planning, and practical database administration skills.

The MSDBA is a specialized professional degree designed for chief information officers (CIO), database administrators, software engineers, web application developers, and other business and technology professionals seeking skills in creating and managing critically important enterprise data and information. MSDBA graduates will possess the skills to formulate the database technologies and innovations for an organization's success.

Employment of database specialists is expected to grow much faster than the average for all occupations as organizations continue to adopt and integrate increasingly sophisticated technologies. Job increases will be driven by very rapid growth in computer system design and related application services, which is projected to be one of the fastest-growing industries in the U.S. economy. In addition, many job openings will arise annually from the need to replace workers who move into managerial positions or other occupations, or who retire.

### **Program Outcomes**

Master of Science in Database Administration (MSDBA) graduates will be able to perform as professionals with solid database skills who can strategically manage an organization's enterprise databases, analyze fundamental problems, and formulate effective solutions. MSDBA graduates will:

- Be able to analyze business user database requirements, business rules, and policies.
- Understand physical, logical, and application database architectures.
- Exhibit the capacity to translate database modeling theory into sound database design and implementation.
- Demonstrate proficiency in essential database skills, including SQL database programming.
- Be able to critically examine the cause of database problems, design, and develop appropriate database solutions and policies.
- Demonstrate ethical and professional database administration, management, and leadership skills as well as privacy law and policy at the local, state, and national levels.
- Be able to apply fundamental concepts of database security, backup and recovery, and business continuity.
- Understand and apply emerging trends and standards for database best practices, including an understanding of organizational database value and familiarity with strategic enterprise data integration.
- Demonstrate essential communication and interpersonal skills necessary to succeed in today's complex business environment, including the ability to document core business processes.
- Recognize database ethical issues and apply professional standards in database requirements analysis, design, and implementation.

### **Admission Requirements**

Candidates seeking admission to the MSDBA program must possess a baccalaureate degree in Computer Science, Information Systems, Information Technology, or Software Engineering. Candidates who have baccalaureate degrees in other related areas must be approved by the lead faculty or department chair before enrolling.

### **Degree Requirements**

(14 courses; 63 quarter units)

The MSDBA program requires the completion of 54-quarter units of graduate coursework. Where appropriate, a maximum of 13.5quarter units of graduate work completed at another regionally accredited institution may be transferred to meet stated requirements in the program. The degree program consists of ten courses plus the two-part MSDBA graduate project (two courses, 4.5 quarter units each) that cannot be taken until all other core courses have been completed. Prior to beginning any graduate level course, students who do not possess a baccalaureate degree in a technology related field must successfully complete the two program prerequisites.

### **Program Prerequisites**

(2 courses; 9 quarter units)

Students enrolling in the MSDBA program should have an accredited bachelor's degree, preferably in a technology related field. Undergraduate courses in business, mathematics, computer science, and/or technology will prepare students to successfully complete the program.

| ITM 440 | Database Systems Concepts and Data Modeling |
|---------|---|
| ITM 450 | Database Processing and Administration      |
|         | (Prerequisite: ITM 440)                     |

Students who possess the requisite knowledge, but have not taken the prerequisites, may demonstrate comparable knowledge through challenge exams.

### **Core Requirements**

(12 courses; 54 quarter units)

- DAT 600 Database Theory, Modeling and Design DAT 610 Database Implementation and Maintenance (Prerequisite: DAT 600) Structured Query Language DAT 620 (Prerequisite: DAT610) Database Programming DAT 630 (Prerequisite: DAT 620) Database Administration and Security DAT 640 (Prerequisite: DAT630) DAT 650 Database Disaster Recovery (Prerequisite: DAT 640) DAT 660 Enterprise Database Management (Prerequisite: DAT600) Enterprise Business Intelligence DAT 670 (Prerequisite: DAT 660) Database Web Technologies DAT 680 (Prerequisite: DAT630) **Emerging Database Technologies** DAT 690 (Prerequisite: DAT 680) DAT 691 Database Research Project I (Prerequisites: Successful completion of nine of the ten core MSDBA courses)
- DAT 692 Database Research Project II (Prerequisite: DAT 691)

## ■ MASTER OF SCIENCE IN ENGINEERING MANAGEMENT <sup>(\*)</sup>

(720-810-892, 893, 897, 898) Faculty Advisor: Shekar Viswanathan • (858) 642-8416 • sviswana@nu.edu

The Master of Science in Engineering Management program (MSEM) is designed to bring the benefits of modern technology and high quality graduate-level education to engineers, scientists, and technologists interested in furthering their skills in engineering management with specialization in any of the following areas:

- Project/Program Management, so as to become effective future project/program managers;
- Enterprise Architecture so as to prepare technically qualified individuals for a responsible management role in the management of enterprise architecture;
- Supply Chain Management and e-Logistics so as to become experts in warehousing, transport, materials planning, inventory control, order cycle management, purchasing, and customer service and enterprise architecture to become experts in computer architecture security, and enterprise architecture specialist in managing the design and implementation of comprehensive enterprise architecture.
- Certified Greenbelt and Blackbelt in Lean Six Sigma programs for improving enterprise excellence.

These programs offer practical business perspectives necessary for engineering management. Unlike traditional MBA programs, these programs emphasize required management skills that are specifically built on the students' technical backgrounds and experience. The custom-designed mix of management concepts and technical expertise will help prepare professionals to direct major public and private organizations in the increasingly complicated managerial environment of today's competitive global, technical environment. In this program, engineering management principles are broadly based and draw from many different disciplines such as: applied sciences, engineering, natural sciences, mathematics, economics, business, and social sciences.

### Relevance to the Real World

Engineering management leadership has become a highly sought skill in today's competitive global technological marketplace. It is now a well recognized profession in most industries. Within this curriculum are the following areas of specializations: project/program management, enterprise architecture, Lean Six Sigma, and supply chain management and e-Logistics. These four curricula provide a broad perspective of engineering management careers that are of current interest and need.

### Degree Requirements

(14 courses; 63 quarter units)

To receive a Master of Science in Engineering Management, students must complete 54 quarter units involving twelve courses. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. Students should refer to the section in the graduate admission requirements for specific information regarding application and evaluation.

This degree is structured as follows: all students complete the core requirements, an area of specialization, and two program electives.

### **Program Prerequisites**

(2 courses; 9 quarter units)

Candidates for the program must possess a bachelor's degree in engineering, engineering technology, physical sciences, or a closely related area from an accredited university. Interested students from other disciplines may be admitted to the program but may be required to complete additional courses. Non-degree students will not be allowed to enter this program. For those who have a general non-science and non-engineering degree, admission is based on relevant experience and the appropriate program prerequisites:

MGT 409C Principles of Management and Organization MNS 205 Introduction to Quantitative Methods and Statistics

These courses may be waived if their equivalents have been completed at the undergraduate level with a grade of "C" or better.

### **Core Requirements**

(6 courses; 27 quarter units)

| ENM 600  | Introduction to Engineering Management            |
|----------|---|
| ENM 601  | Engineering Project Management                    |
| ENM 602  | Management of Risk, Contracts, and Legal Issues   |
| ENM 603  | Managing Projects in Operations Management        |
|          | (Prerequisite: ENM 600)                           |
| ENM 607A | Engineering Management Capstone Course            |
|          | (Prerequisite: ENM 600, ENM 601, ENM 602, ENM 603 |
|          | and all pertinent specialization courses)         |
| ENM 607B | Engineering Management Capstone Course            |
|          | (Prerequisite: ENM 607A)                          |
|          |   |

### **Program Electives Courses**

(2 courses; 9 quarter units)

For electives, students should select two of the following 600 level courses. Some of these courses are more relevant to a given discipline than others and hence students are asked to consult the lead faculty regarding course selection. (\*Students in the Lean Six Sigma Area of Specialization must take PME 601 and PME6 02, for more information see the Area of Specialization in Lean Six Sigma)

| ENM 604 | Quality Management                               |
|---------|--|
| ENM 605 | Infrastructure Management                        |
| TMG 655 | Management of R and D and Innovation Processes   |
| MNS 601 | Statistics for Business                          |
| SCL 605 | Technology Assessment and Integration for Supply |
|         | Chain Management and e-Logistics                 |
| CIS 607 | System Integration and Client Server Computing   |
|         | (Prerequisite: CIS 601)                          |
|         |  |

### **Requirements for the Areas of Specialization**

(4 courses; 18 quarter units)

Students must select one Area of Specialization defined below:

## ▲ Area of Specialization in Enterprise Architecture

(4 courses; 18 quarter units)

The specialization courses as listed below are offered in conjunction with the FEAC Institute at National University. Successful completion of all four courses in required as part of the Enterprise Architecture (EA) specialization in the engineering management program.

Upon completion of the program, graduates from Enterprise Architecture will be able to:

- Apply quantitative analytical skills and techniques to manage projects.
- Apply a multidisciplinary approach involving the integration of enterprise architecture, management, quality, and DODAF Framework.
- Integrate state-of-the-art technological advances to the practice of project management engineering, including the use of information technology and supporting software applications.
- Design and implement comprehensive architecture enterprise in accordance with DODAF architecture process.
- Describe the Federal Enterprise Architecture Vision and Principles as per CIO Council's "FEAF" V 1.1 and the Government Accounting Office's (GAO) view of Enterprise Architecture, Office of Management and Budget (OMB).
- Establish principles for managing Enterprise Architecture Contractors.
- Develop Strategic Planning relates to Enterprise Architecture.
- Develop an integrated Infrastructure Architecture and relating it to the FEA PMO.
- Assess the impact of Enterprise Architecture projects in the finance of corporations and businesses and develop appropriate action plans through project management engineering.
- Integrate tools and techniques, resources, organizational systems, and decision making processes for the successful completion of Enterprise Architecture projects.

The courses include:

### DODAF [DEPARTMENT OF DEFENSE ARCHITECTURE FRAMEWORK] CERTIFICATION PROGRAM COURSES

| DAF 601   | Archi | itecture Fi | amev | vork | Ba | sics |
|-----------|-------|-------------|------|------|----|------|
| B I E COR | ~     | 1.0         |      | -    |    |      |

- DAF 602 Core and Supporting Products
- DAF 603 Enterprise Architecture Planning
- DAF 604 Advanced Architecture Modeling and Analysis

or

### FEA(F) [FEDERAL ENTERPRISE ARCHITECTURE (FRAMEWORK)] CERTIFICATION PROGRAM COURSES

- EEA 601 Enterprise Architecture Concepts and Theory
- EEA 602 Enterprise Architecture Planning
- EEA 603 Enterprise Architecture Implementation
- EEA 604 Enterprise Architecture Integration

### ▲ Area of Specialization in Lean Six Sigma

(4 courses; 18 quarter units) (898)

The specialization courses as listed below will be offered in conjunction with the Management Sciences Division of VSE Corporation

(http://www.vsecorp.com/services/management/index.html) and Extended Learning at National University. Successful completion of all four courses (EEX1201X, EEX1202X, EEX1203X, and EEX1204X)) is required as part of the Lean Six Sigma specialization in the MS Engineering Management Program.

### **GREEN BELT PROGRAM COURSES**

(2 courses; 9 quarter units)

EEX1201X Fundamentals of Process Analysis and Optimization EEX1202X Operational Efficiency and Cost Effectiveness

### BLACK BELT PROGRAM COURSES

(2 courses; 9 quarter units)

| EEX1203X | Fundamentals of Leading and Managing Continuous |
|----------|---|
|          | Measurable Improvement                          |
| EEX1204X | Advanced Topics in Process Analysis             |

# GREEN BELT AND BLACK BELT CERTIFICATION COURSE (Not a requirement for the degree or area of specialization)

EEX1205X Six Sigma Project Practicum

Thus, the combined Green Belt and Black Belt program courses are equivalent to 160 hours of instruction. EEX1205X is required only to obtain the Black Belt and Green Belt certifications in conjunction with the Green Belt and Black Belt program courses.

### **Program Electives Courses**

(2 courses; 9 quarter units)

All students in the Lean Six Sigma Area of specialization are required to take the following two courses as their electives for the program:

PME 601Planning, Performing and Controlling ProjectsPME 602Managing Engineering Competencies and Skills

## Area of Specialization in Project

Management<sup>®</sup>(893)

(4 courses; 18 quarter units)

From small companies to giant global institutions, project managers are fueling much of the successful development of exciting technical enterprises. Talented and knowledgeable project managers command the best assignments, salaries, and other compensation and bonuses. They are the future leaders and entrepreneurs. Good project managers are not born, but are nurtured from a combination of experience, time, talent, and training. Successful projects don't happen spontaneously; they require preparation, planning, and organization. This program is designed to provide systematic training to students pursuing an engineering project management career. Students who successfully complete this program are academically trained to appear for Project Management Professional (PMP) certification administered by the Project Management Institute.

Upon completion of the program, graduates from project management will be able to:

- Apply quantitative analytical skills and techniques to manage projects
- Apply a multidisciplinary approach involving the integration of engineering, management, quality, and cultural analysis to the conduct of project management engineering.
- Integrate state-of-the-art technological advances to the practice of project management engineering, including the use of information technology and supporting software applications.
- Apply a global mindset and a detailed knowledge of business environments to the practice of project management engineering.
- Assess the impact of projects in the finance of corporations and businesses and develop appropriate action plans through project management engineering.
- Integrate tools and techniques, resources, organizational systems, and decision making processes for the successful completion of projects.

### **Required Courses**

| PME 601 | Planning, Performing and Controlling Projects         |
|---------|---|
|         | (Prerequisite: ENM 600, ENM 601, ENM 602, and ENM     |
|         | 603)  |
| PME 602 | Managing Engineering Competencies and Skills          |
|         | (Prerequisite: ENM 600, ENM 601, ENM 602, and ENM     |
|         | 603)  |
| PME 603 | Product Management                                    |
|         | (Prerequisite: ENM 600, ENM 601, ENM 602, and ENM     |
|         | 603)  |
| PME 604 | Project Financing and Associated Financial Management |
|         | (Prerequisite: ENM 600, ENM 601, ENM 602, and ENM     |
|         | 603)  |

# ▲ Area of Specialization in Supply Chain Management and e-Logistics <sup>2</sup>

(892)

(4 courses; 18 quarter units)

From small companies to giant global institutions, the concept of integration within business and between businesses has gained increased validity. There has been a growing recognition that supply chain management and e-Logistics help achieve the twin goals of cost reduction and service enhancement. Supply chain management and e-Logistics have in turn been impacted and driven by e-business strategies and technologies. This program is designed to provide comprehensive academic training on supply chain management and e-Logistics.

### **Program Outcomes**

Students successfully completing the Supply Chain Management and e-Logistics will:

- Learn the key elements and flows of contemporary supply chain management and e-Logistics, such as technology requirements, warehousing, transport, materials planning, inventory control, order cycle management, purchasing, and customer service.
- Understand major challenges with in the implementation of an integrated supply chain management and e-Logistics strategies including technology selection, internet security, accessibility and quality control.
- Understand the application of Agile and Lean supply chains concepts and methods
- Develop the cost effective e-Logistics strategies in creating efficient and effective supply chain networks

### **Required Courses**

| SCL 601 | Supply Chain Management Fundamentals             |
|---------|--|
| SCL 602 | Supply Chain Management - Strategies, Design and |
|         | Implementation                                   |
| SCL 603 | Logistics Management Fundamentals                |
| SCL 604 | Advanced Supply Chain Logistics Management       |

## MASTER OF SCIENCE IN ENVIRONMENTAL ENGINEERING

### (720-813)

 $Faculty \ Advisor: Hassan \ Badkoobehi \bullet (858) \ 642‐8487 \bullet hbadkoob@nu.edu$ 

The Master of Science in Environmental Engineering (MSENE) program is designed to provide students with the requisite mathematical foundations and environmental processing skills for solving real world problems.

Environmental engineers are the technical professionals who

identify and design solutions for environmental projects. They are responsible for safe drinking water, treating and properly disposing of wastes, maintaining air quality, controlling water pollution, and remediating contaminated sites. Environmental engineers also develop new and improved means to protect the environment. This discipline involves traditional engineering components such as mathematics, physics, chemistry, and engineering design. Its education and practice also includes disciplines such as biology, microbiology, ecology, public health, geology, meteorology, economics, political science, and computer science. To address the spectrum of issues facing the environment, environmental engineers are broadly educated as well as technically trained.

The following subjects are now considered essential in the background of an environmental engineer: ecology, microbiology, ground water, solid waste, farm waste, noise pollution, environmental impact assessment, environmental legislation and modeling, and remediation of site contamination with spills or improper disposal of hazardous materials.

Environmental engineers are employed by engineering consulting firms, industries that need to comply with pollution emission and discharge regulation, private and municipal agencies that supply drinking water and treat and dispose wastes, government agencies that monitor and regulate waste discharges and air emissions, private and government laboratories, universities that conduct environmental research, international agencies that transfer knowledge to developing countries, and public-interest groups that advocate environmental protection.

### **Program Outcomes**

Master of Science in Environmental Engineering degree graduates will be able to:

- Assess and analyze the principles of water chemistry.
- Analyze water, air, and land resources as well as threats and engineering solutions to each.
- Solve numerical practical environmental problems as illustrated to clarify key concepts and process engineering facility design.
- Describe the role of water in our environment: water quality, source, and prevention of water pollution.
- Analyze the principles involved in treatment and processing of water from different sources.
- Describe how wastewater is collected and treated and identify biological and chemical toxin pollutants from wastewater.
- Explain the concept of risk as applied to environmental project planning.
- Describe air quality management and analyze the causes and effects of air pollution.
- Provide a methodology to determine the hazardous air pollutants from industrial/commercial sources.
- Analyze the economical, social, legal, and political aspects of waste management.
- Identify the identification, transportation, monitoring, storage, minimization, treatment, and disposal of hazardous waste material/waste.

### Admission Requirements

Candidates seeking admission to the program must possess a baccalaureate degree in good academic standing from a regionally accredited institution. The non-engineering student will find the technical focus of many courses challenging yet essential. These students should fulfill the program prerequisites or waive them through a course challenge exam. Students considering this program should contact the program lead faculty prior to enrollment.

### **Degree Requirements**

(12 courses; 54 quarter units)

The Master of Science in Environmental Engineering requires completion of 54 quarter units of graduate coursework. Where appropriate, students can transfer a maximum of 13.5 quarter units of graduate work completed at another regionally accredited institution to meet stated requirements in the program. Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

Students are expected to possess or to have access to a computer outside of National University to work on projects both on and off campus. Given the nature of instructional technology, the following course is not required, but highly recommended for students who need basic skills in computer technology and electronic research:

CIS 301 Management Information Systems

### **Program Prerequisites**

(6 courses; 21 quarter units)

Students who have a Bachelor of Science in Engineering or related field are exempt from the prerequisites. All other applicants with a non-engineering bachelor's degree must make up the deficiencies with the following prerequisites:

| SCI 101  | Introduction to Chemistry*<br>(Recommended: Prior completion of MTH 204 or MTH 215 or MTH 216A/B) |
|----------|---|
| SCI 101A | Introduction to Chemistry Laboratory* (1.5 quarter units)   |
|          | (Prerequisite: SCI 101)   |
| CSC 208  | Calculus for Computer Science I   |
|          | (Prerequisite: MTH 215)   |
| CSC 220  | Applied Probability and Statistics  |
|          | (Prerequisite: MTH 215)   |
| SCI 203  | Introduction to Microbiology  |
|          | (Recommended: prior completion of SCI 201 and 201A,   |
|          | SCI 202 and 202A, SCI 100 and 100A, SCI 101 and 101A,   |
|          | or equivalent courses.)   |
| SCI 203A | Introduction to Microbiology Lab (1.5 quarter units)  |
|          | (Prerequisite: SCI 203)   |

These courses may be waived if their equivalents have been completed at the undergraduate level with a grade of "C" or better, or if applicants have successfully passed a challenge exam.

### **Core Requirements**

(10 courses; 45 quarter units)

| ENE 601 | Environmental Engineering Laboratory                  |
|---------|---|
|         | (Prerequisite: SCI 101 or SCI 101A)                   |
| ENE 602 | Environmental Microbiology and Biological Treatment   |
|         | (Prerequisite: SCI 203, 203A)                         |
| ENE 603 | Unit Processes of Environmental Engineering           |
|         | (Prerequisite: CSC 220, CSC 208)                      |
| ENE 604 | Engineering Aspects of Environmental Engineering      |
|         | Quality Control                                       |
| ENE 605 | Foundation of Air Pollution Engineering and Equipment |
|         | Design  |
| ENE 606 | Principles of Water and Wastewater Engineering and    |
|         | Treatment   |
|         | (Prerequisite: CSC 220)                               |
| ENE 607 | Toxic and Hazardous Waste Remediation Analysis and    |
|         | Solid Waste Recovery                                  |
|         | (Prerequisite: SCI 101 or SCI 101A)                   |
| ENE 608 | Site Assessment and Environmental Remediation         |
|         | Methodologies   |

### ENE 609A Master's Research Project I

(Prerequisites: All core requirements) ENE 609B Master's Research Project II (Prerequisite: ENE 609A)

### Program Electives

(2 courses; 9 quarter units)

The following courses are suggested electives, taken in consultation with lead faculty and department chair.

| ENM 600 | Introduction to Engineering Management                             |
|---------|--|
| ENM 601 | Engineering Project Management                                     |
| ENM 602 | Management of Risk, Contracts, and Legal Issues                    |
| ENM 603 | Managing Projects in Operations Management (Prerequisite: ENM 600) |

## ■ MASTER OF SCIENCE IN HOMELAND SECURITY AND SAFETY ENGINEERING<sup>®</sup>

### (720-818)

Faculty Advisor: Shekar Viswanathan • (858) 642-8416 • sviswana@nu.edu

The 9/11 events have highlighted the national (and to some extent international) need for highly educated and experienced professionals in the area of homeland security and safety engineering. This program, due to its special nature, represents an interdisciplinary area of research and application that brings together all fields of engineering and science from the most traditional to the most technologically advanced and novel. A well developed curriculum, with emphasis on fundamentals and practices that define the theory and effective practice of asset and people protection, provides the focus for the Homeland Security and Safety Engineering degree.

There are two well known external certifications related to security and safety professionals. The Certified Protection Professionals (CPP) program is the product of the American Society for Industrial Security (ASIS), an international organization for professionals responsible for security. This includes managers and directors of security departments or organizations, as well as full-time security practitioners.

The Certified Safety Professional (CSP) designation has become the mark of the professional within the safety field. This certification is administered by the Board of Certified Safety Professionals (BCSP). The importance of this designation as a measure of professional standing and competence is accepted not only by the profession but is also gaining acceptance by federal, state, and local governments; by employers; and by the public.

The Homeland Security and Safety Engineering program is designed so that students who successfully complete it are academically trained to appear for Certified Safety Professional (CSP) certification administered by the Board of Certified Safety Professionals, and for the American Society of Industrial Security (ASIS) Certified Protection Professional (CPP) exam.

### Program Outcomes

Master of Science in Homeland Security and Safety Engineering graduates will be able to:

- Understand and appreciate the complex issues related to safety and security
- Understand the engineering/technology behind safety and security solutions
- Apply quantitative and quantitative analytical skills and

techniques to safety and security of assets.

- Apply a multidisciplinary approach involving the integration of quality, and risk analysis to the safety/security of assets.
- Integrate state-of-the-art technological advances to the practice of modern safety/security engineering program, including the use of information technology, and supporting software applications.
- Apply a global mindset to safety/security issues related to assets.
- Assess the impact of safety/security issues for the operation of corporations and businesses and develop appropriate action plans through detailed engineering.
- Integrate tools and techniques, resources, organizational systems, and decision making processes for the successful implementation of safety and security plans.
- Possess the knowledge necessary to become certified as a safety (CSP) and security professional (CPP).

### **Degree Requirements**

(14 courses; 63 quarter units)

To receive a Master of Science in Homeland Security and Safety Engineering, students must complete 54 quarter units involving twelve courses. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. Students should refer to the section in the graduate admission requirements for specific information regarding application and evaluation.

### **Program Prerequisites**

(1 course; 4.5 quarter units)

Candidates for the program must possess a bachelor's degree in engineering, engineering technology, physical sciences, or a closely related area from an accredited university. Interested students from other disciplines may be admitted to the program but may be required to complete additional courses. Non-degree students will not be allowed to enter this program. For those who have a non-science or non-engineering degree, admission is based on relevant experience and the following minimum program prerequisite:

SCI 101 Introduction to Chemistry\* (Recommended: Prior completion of MTH 204 or MTH 215 or MTH 216A/B)

This course may be waived if the equivalent has been completed at the undergraduate level with a grade of "C" or better.

### **Core Requirements**

(12 courses; 54 quarter units)

Students enrolled in this program are advised to take the courses in the order specified below.

| SSE 602 | Design and Evaluation of a Modern Safety Program      |
|---------|---|
| SSE 603 | Introduction to Security Engineering                  |
| SSE 604 | Security Engineering - Planning and Design            |
|         | (Prerequisite: SSE 603)                               |
| SSE 605 | Chemical Process Safety Engineering                   |
|         | (Prerequisite: SSE 602)                               |
| SSE 606 | Managing Information Security                         |
| SSE 607 | Fire and Explosion Engineering                        |
| SSE 608 | Science of explosives and biological threat materials |
|         | (Prerequisite: SSE 603)                               |
| SSE 609 | Planning and Response for Terrorism                   |
| SSE 611 | Emergency Management                                  |
| SSE 612 | Disaster Management and Preparedness                  |

- SSE 610 A Safety and Security Engineering Capstone Course (*Prerequisites: SSE 600 through SSE 609*)
- SSE 610 B Safety and Security Engineering Capstone Course (*Prerequisite: SSE 610A*)

# ■ MASTER OF SCIENCE IN INFORMATION SYSTEMS<sup>2</sup>

### (720-812)

Faculty Advisor: Rell Snyder • (714) 429-5282 • rsnyder@nu.edu

The Master of Science in Information Systems (MSIS) program is designed to provide students with the requisite management, business, strategic, and technical skills needed to help them apply information systems technology more efficiently and effectively. The MSIS program's objective is to close this gap by providing the needed education and career development foundations, including oral, written, and presentation skills; technical skills; people and business skills; and ethics and professionalism, which are integrated throughout its individual courses. The curriculum is designed as a set of interrelated building blocks consisting of foundations, core, integration, and career tracks.

### Admission Requirements

Candidates seeking admission to the program must possess a baccalaureate degree. This program is designed to offer information systems expertise to those from various education backgrounds. Enrolling students must have an undergraduate degree in information systems, information technology, computer science, or software engineering or must have approval of the lead faculty and have some background in business and technology.

National University students who completed a transition program as part of their undergraduate degree and who satisfy MSIS transition program requirements described in the catalog description of various undergraduate programs must complete a minimum of 45 quarter units for their MSIS degree. The number of units required for the MSIS program is dependent on the coursework completed in the Bachelors transition program and the grades earned.

### **Degree Requirements**

(12 courses; 54 quarter units)

The MSIS program requires the completion of 54-quarter units of graduate coursework. Where appropriate, a maximum of 13.5quarter units of graduate work completed at another regionally accredited institution may be transferred to meet stated requirements in the program. The degree program consists of ten courses plus the two-part MSIS graduate project (two courses; 4.5 quarter units each) that cannot be taken until all other core courses have been completed or by approval of the lead faculty.

### **Core Requirements**

(12 courses; 54 quarter units)

| CIS 601 | Information Systems Strategies, Policies and Ethics |
|---------|---|
| CIS 602 | Network Services and Protocols                      |
|         | (Prerequisite: CIS 601 or approval of lead faculty) |
| CIS 603 | Database Management for Decision Support Systems    |
|         | (Prerequisite: CIS 601 or approval of lead faculty) |
| CIS 604 | Organizational Management and Information System    |
|         | (Prerequisite: CIS 601 or approval of lead faculty) |
| CIS 606 | End User Information Systems                        |
|         | (Prerequisite: CIS 601 or approval of lead faculty) |
| CIS 607 | Systems Integration and Client/Server Computing     |
|         | (Prerequisite: CIS 601 or approval of lead faculty) |
| CIS 608 | Knowledge Management-Knowledge-Based Systems        |
|         | (Prerequisite: CIS 601 or approval of lead faculty) |

| CIS 609  | Automated Knowledge Management Systems                     |
|----------|--|
|          | (Prerequisite: CIS 608)                                    |
| TMG 625  | Systems Analysis and Design                                |
| TMG 655  | Management of R and D and Innovation Processes             |
| CIS 620A | Master's Research Project I                                |
|          | (Prerequisites: All core requirements with a GPA of 3.0 or |
|          | approval of lead faculty)                                  |
| CIS 620B | Master's Research Project II                               |
|          | (Prerequisite: CIS 620A)                                   |
|          |  |

## ■ MASTER OF SCIENCE IN SOFTWARE ENGINEERING<sup>√</sup><sup>†</sup>

### (720-603)

Faculty Advisor: John Watson • (858) 642-8458 • jwatson@nu.edu

The Master of Science in Software Engineering (MSSE) program is designed to prepare graduates to be pioneers and leaders in software engineering. They are trained to be practitioners in the essential areas of software architecture, computer system engineering, computer-based media, common object-oriented engineering, and database design. Software engineering is a discipline that offers tools, processes, methods, and techniques to develop and maintain quality software. Software engineering can very well be considered the practical application of computer systems knowledge in the design and development of software, and the required associated documentation, operation, and maintenance. The computer industry is in desperate need of technically qualified people in software engineering.

This program provides professional education in both systems and software development using state-of-the-art design and development methods in compliance with standards set by the IEEE, the Department of Defense, and the Software Engineering Institute at Carnegie Mellon University. This program is designed to provide students with the management and technology skills in the discipline of software engineering. Graduates are prepared for positions in software project management, software development, database management systems (DBMS), and software quality assurance.

### **Program Outcomes**

Upon successful completion of this program, students will be able to:

- Demonstrate both knowledge and practice of design and development methodologies for managing software projects.
- Understand the principles of database design, analysis, and be able to develop object-oriented or relational database management systems.
- Utilize the designs methodologies of hardware/software integration, and networking and graphical user interface for software projects.
- Understand the principles of software architecture with emphasis on component functionality, data links, and coordination models.
- Design, implement, and demonstrate a prototype software application that includes use of a database management system and can be run in a web-based or client-server environment.
- Develop necessary project requirements and solution models, software project documentation, and implement their software design models and documentation.
- Test their software and demonstrate that their software meets high quality standards within the software engineering discipline, and demonstrate their understanding of software tools and processes associated with the software engineering life cycle.
- Demonstrate graduate-level written and oral communication and presentation skills.

### **MSSE Transition Program**

National University students who completed a transition program as part of their undergraduate degree and who satisfy MSSE transition program requirements described in the catalog description of various undergraduate programs must complete a minimum of 45 quarter units for their MSSE degree. The number of units required for the MSSE program is dependent on the coursework completed in the Bachelors transition program and the grades earned.

### **Degree Requirements**

To receive a MSSE, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. Students should refer to the section in the graduate admission requirements for specific information regarding application and evaluation.

#### **Program Prerequisites**

(5 courses; 22.5 quarter units)

Candidates must possess a Bachelor of Science in Computer Science degree. Students holding non Computer Science baccalaureate degrees must complete the following prerequisite coursework:

| CSC 242 | Introduction to Programming Concepts and Methods |
|---------|--|
|         | (Prerequisites: CSC 200 and CSC 208)             |
| CSC 252 | Programming in C++                               |
|         | (Prerequisite: CSC 242)                          |
| CSC 300 | Object Oriented Design and Analysis              |
|         | (Prerequisite: CSC 252)                          |
| CSC 335 | Data Structures and Algorithms                   |
|         | (Prerequisite: CSC 300, CSC 331)                 |
| CSC 422 | Principles of Database Design                    |
|         | (Prerequisite: CSC 300)                          |
|         |  |

Students who can provide verifiable documented proof of proficiency in a specific area of the prerequisite courses (programming, database design, and operating systems) should meet with lead faculty of the MSSE program. Lead faculty will interview the student and make a determination if any of the required prerequisite coursework may be waived, based on the interview and the documentation.

#### **Core Requirements**

(12 courses; 54 quarter units)

Students enrolled or seeking admission to the program can start any course with the exception of SEN 660, SEN 686A, and SEN 686B; however, it is recommended that they take the courses in the order specified below.

| SEN 620  | Principles of Software Engineering           |
|----------|--|
| SEN 621  | Software Tools and Processes                 |
| SEN 625  | Software Architecture Theory and Practice    |
| SEN 630  | Applied Software Architecture                |
| SEN 651  | User Interfaces and Software Engineering     |
| SEN 640  | Secure Software Design and Programming       |
| SEN 645  | Designing Database Applications              |
| SEN 655  | Application Software Development for the Web |
| SEN 635  | Software Testing Strategies and Metrics      |
| SEN 660  | Software Quality Engineering                 |
| SEN 686A | Software Engineering Project I               |
|          | (Prerequisite: SEN 660)                      |
| SEN 686B | Software Engineering Project II              |
|          | (Prerequisite: SEN 686A)                     |
|          |  |

### MASTER OF SCIENCE IN SYSTEMS ENGINEERING

(720-830)

Faculty Advisor: Jack Elson • (310) 662-2158 • jelson@nu.edu

During the last quarter of the 20th century, the concept of systems and general systems theory has become increasingly more relevant to scientists, engineers, industry, and society in general. In the 21st century, technology has become an intertwined part of everyday life. It continues to be ever more complex with advances in applied science, such as mobile communications, global positioning systems, and bioengineering, to name a few. Looking forward, this environment calls for an understanding of how these technologies affect society so that their design and implementation provide efficient, effective, and quality outcomes with no unintended consequences.

These systems are comprised of three types of entities: a) complex products such as aircraft, ships, land vehicles, and military hardware; b) networks of information and infrastructure such as air traffic control, highways, and public works and environmental processes; and c) organizations that design, build, and maintain these products, systems and related services, such as public and private, for-profit and non-profit businesses and , military and government agencies. The technologies of these systems as well as the people who operate them are both equally important in the curriculum and therefore the science of both the physical and managerial are studied.

This program provides knowledge related to the life cycle of systems including definition, development, deployment, and decommission. Issues of ethics and diversity will be considered to instill these concepts and values as part of the social systems that are intertwined with technological systems and their design.

### **Degree Requirements**

To receive a Master of Science in Systems Engineering, students must complete 54 quarter units involving twelve courses. Students must select one of the areas of specializations to fulfill overall degree requirements. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. Students should refer to the section in the graduate admission requirements for specific information regarding application and evaluation.

Since this program is defined for various areas of specialization, there are specific course requirements as defined in this catalog.

### Program Prerequisites

224

(4 courses; 18 quarter units)

Candidates for the program must possess a bachelor's degree in engineering, engineering technology, or physical sciences or a closely related area from an accredited university. Interested students from other disciplines may be admitted to the program but may be required to complete additional courses. Non-degree students will not be allowed to enter this program. For those who have a general non-science and non-engineering degree, admission is based on relevant experience and the following program prerequisites:

| MNS 205 | Introduction to Quantitative Methods for Business   |
|---------|---|
|         | (Prerequisite: Placement Evaluation)                |
| EGR 301 | Engineering Mathematics (Cross-listed with CSC 310) |
|         | (Prerequisite: MTH 215)                             |
| EGR 307 | Introduction to Software, Engineering and Ethics    |
| EGR 310 | Engineering Economics                               |
|         | (Prerequisite: MTH 215)                             |
|         | -   |

### **Core Requirements**

(8 courses; 36 quarter units)

| SYE 600  | Introduction to Systems and the Design Process   |
|----------|--|
| SYE 601  | Systems Analysis and Design Evaluation           |
|          | (Prerequisite: SYE 600)                          |
| SYE 602  | Advanced Systems Design                          |
|          | (Prerequisite: SYE 601)                          |
| SYE 603  | System Dynamics                                  |
|          | (Prerequisite: SYE 602)                          |
| ENM 600  | Introduction to Engineering Management           |
| SEN 620  | Principles of Software Engineering               |
| ENM 607A | Engineering Management Capstone Course I         |
|          | (Prerequisite: All core requirements in program) |
| ENM 607B | Engineering Management Capstone Course II        |
|          | (Prerequisite: ENM 607A)                         |
|          |  |

### **Requirements for the Areas of Specialization**

(4 courses; 18 quarter units)

Students must select one of the following Areas of Specialization:

### Area of Specialization in Engineering Management

(900) (4 courses; 18 quarter units)

Students must select four courses from the following

| ENM 601 | Engineering Project Management                  |
|---------|---|
| ENM 602 | Management of Risk, Contracts, and Legal Issues |
| ENM 603 | Managing Projects in Operations Management      |
|         | (Prerequisite: ENM 600)                         |
| ENM 604 | Quality Management                              |
|         |   |

### ▲ Area of Specialization in Enterprise Architecture

(897)

The specialization courses as listed below will be offered in conjunction with the FEAC Institute at National University. Successful completion of all four courses in either certification program is required as part of the Enterprise Architecture specialization Program. The student will choose either DoDAF or FEA(F):

### DoDAF [DEPARTMENT OF DEFENSE ARCHITECTURE FRAMEWORK] CERTIFICATION PROGRAM COURSES

| DAF 601 | Architecture Framework Basics    |
|---------|----------------------------------|
| DAF 602 | Core and Supporting Products     |
| DAF 603 | Enterprise Architecture Planning |

- DAF 603 Enterprise Architecture Planning
- DAF 604 Advanced Architecture Modeling and Analysis

### FEA(F) [FEDERAL ENTERPRISE ARCHITECTURE (FRAMEWORK)] CERTIFICATION PROGRAM COURSES

| EEA 601 | Enterprise Architecture Concepts and Theory |
|---------|---|
| EEA 602 | Enterprise Architecture Planning            |
| EEA 603 | Enterprise Architecture Implementation      |
| EEA 604 | Enterprise Architecture Integration         |

### Area of Specialization in Industrial Engineering

(895)

(4 courses; 18 quarter units)

| IEM 601 | Engineering Economy                      |
|---------|--|
| IEM 602 | Managing Production Planning and control |
| IEM 603 | Managing Facilities Planning Layout      |
| IEM 604 | Ergonomics and Occupational Safety       |

### Area of Specialization in Software Engineering

(902)

(4 courses; 18 quarter units)

Students must select four courses from the following

- SEN 621 Software Tools and Processes
- SEN 625 Software Architecture Theory and Practice
- SEN 630 Applied Software Architecture
- SEN 651 User Interfaces and Software Engineering
- SEN 645 Designing Database Applications
- SEN 655 Application Software Development for the Web
- SEN 635 Software Testing Strategies and Metrics

### ■ MASTER OF SCIENCE IN TECHNOLOGY MANAGEMENT<sup>®</sup>

(720-806)

Faculty Advisor: Farnaz Sharifrazi • (858) 642-8468 • fsharifrazi@nu.edu

The Master of Science in Technology Management (MSTM) prepares individuals to manage and lead the technology in any organizations. From the Internet Renaissance, a new way of managing information technology resources in organizations has emerged. Information technology has expanded the technological management responsibilities beyond desks, offices, labs, manufacturing sites, cities, and countries.

Technology has become the essential force in any industry. Over the past decade the synergy of business, technology, and people have created the abundance of opportunities in all fields of technology management, especially information technology.

Organizations rely on information technology, for example, management knowledge, and superior leadership practices to compete in the technology driven business world. Today's managers must build a set of core technological competencies over their career due to the rapid trends in their industry.

### **Program Outcomes**

Upon successful completion of this program, students will be able to:

- Identify and demonstrate their knowledge of emerging technologies.
- Manage and implement technologies aligned with the business of an organization.
- Perform systems analysis, design, planning, and integration of technology within an organization.
- Identify and evaluate hardware, software, and systems applications that support their own technologies.
- Determine strategic technology management policies, and procedures required of the organization.
- Detect measure and manage technology risk.
- Understand and propose technology management solutions for

decision support and knowledge management.

- Explain the requirements for superior technology and operations leadership.
- Demonstrate leadership and behavioral challenges within an ethical framework loyal to company values. Demonstrate and appraise team skills, project management, communications, and organizational leadership skills in a tech environment.

### Master of Science in Technology Management (MSTM) Transition Program

National University students who completed a transition program as part of their undergraduate degree and who satisfy MSTM transition program requirements described in the catalog description of various undergraduate programs must complete a minimum of 45.0 quarter units for their MSTM degree. The number of units required is dependent on the coursework completed in the bachelor's transition program and the grades earned.

### **Degree Requirements**

(12 courses; 54 quarter units)

To receive a Master of Science in Technology Management, students must complete at least 54 quarter units of graduate coursework. A total of 13.5 quarter units of graduate credit may be granted for equivalent work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Refer to the section on graduate admission requirements for specific information regarding application and evaluation.

### **Program Prerequisites**

A bachelor's degree in business, math, sciences, healthcare, education, and art can utilize this degree in their work discipline.

### **Core Requirement**

(12 courses; 54 quarter units)

The MSTM degree is designed to prepare students to successfully mange the emerging technologies in any organization. It provides broad knowledge on how to become effective and successful manager utilizing information and technology management tools in any organization and industry.

Students come from background areas such as business, financial, management, marketing, technology, nursing, electronics, or the military. Some use the courses as electives for their MA, MBA, or Health Services Administration programs.

| TMG 620  | Principles of Technology Management                |
|----------|--|
| TMG 605  | Ethics and Technology Leadership                   |
| TMG 635  | Strategic Management of Technology and Innovation  |
| TMG 615  | Workflow Technologies and Process Improvement      |
| TMG 625  | Systems Analysis and Design                        |
| TMG 610  | Global Trends in Technology Transfer / Application |
| TMG 603  | Information Security and Risk analysis             |
| TMG 601  | Data Mining Tools: Managing Technology for         |
|          | Competitive Advantage                              |
| TMG 607  | Managing Technology Acquisition and Resources      |
| TMG 640  | Managing Technology Change                         |
| TMG 650A | Final Master Project I                             |
| TMG 650B | Final Master Project II*                           |
|          |  |

\*This is a two-month, one-meeting-per-week course with a significant research component. Students are required to complete at least 27-quarter units of the program required courses before beginning TMG 650A.

## ■ MASTER OF SCIENCE IN WIRELESS COMMUNICATIONS<sup>2</sup>

(720-816)

Faculty Advisor: Ronald Uhlig • (858) 642-8412 •ruhlig@nu.edu

The Master of Science in Wireless Communications (MSWC) program is a professional degree that integrates communication techniques, problem solving strategies, simulation skills and mathematical foundations with hands-on training required to solve real world problems in telecommunications.

The program is designed for professionals and managers to facilitate the learning and application of skills in the field of wireless communications. The program uses a distinctive and challenging curriculum that emphasizes multidisciplinary knowledge and integrates theory through applications and design concepts. Classes combine lectures, case and hands-on studies, individual and team projects, research papers, and participant presentations.

### Program Outcomes

After completion of the MSWC, graduates will be able to:

- Construct a statistical model for signal analysis in communication systems.
- Develop and design wireless communication systems.
- Evaluate and apply wireless networking, protocols, architectures, and standards.
- Identify different kinds of coding and decoding schemes applied to the current wireless standards.
- Build security into wireless communications systems and contrast ethical and related issues in the telecommunications industry.
- Analyze and plan CDMA systems.
- Integrate and implement different types of Third Generation (3G) wireless networks.
- Utilize engineering software for wireless system development including planning of broadband networks.
- Apply the signal and system representations, filter models, noise generation, Monte Carlo simulation, and post-processing using MATLAB and its communication tools.
- Evaluate and forecast economic impacts of continually advancing technologies on wireless service providers, equipment providers, application providers, and consumer.
- Develop the ability of critical thinking and innovative ideas for current and future research in the area of wireless communications.
- Apply Project Management engineering principles to a realworld wireless engineering project

### Careers

Students in the MSWC program will become proficient in analytical, technical, and critical thinking skills, gain a sense of professionalism, and will be instilled with a strong set of values essential for success in the wireless communications field. This program reflects current and future industry needs, and graduates from the MSWC program are trained and prepared to assume a leadership role in the field.

The MSWC arms students with the tools necessary to achieve professional success in both theoretical and practical aspects of communication fields. Graduates are equipped to seek employment in research organizations, computer centers, or wireless communications businesses and enterprises. This program also prepares students for further education in wireless communications enabling graduates to pursue Ph.D. studies, if they desire.

### Admission Requirements

It is assumed that candidates seeking admission to the program possess a baccalaureate degree in engineering, engineering technology, or physical/computational science from an accredited university.

### **Degree Requirements**

(18 courses; 81 quarter units)

The MSWC program requires the completion of 54-quarter units of graduate coursework. Where appropriate, a maximum of 13.5quarter units of graduate work completed at another accredited institution may be transferred to meet stated requirements in the program. The degree program consists of ten courses plus the two part MSWC Master's Research Project. With approval of the instructor, any student may earn up to 10 percent of their grade in any of the Core Courses through an internship or Curricular Practical Training with a company or organization approved by the lead faculty.

### **Program Prerequisites**

(6 courses; 27 quarter units)

Students without a baccalaureate degree in electrical engineering or in a closely related area must complete the following four courses:

| MTH 215 | College Algebra and Trigonometry                             |
|---------|--|
|         | (Prerequisite: Placement Evaluation)                         |
| CSC 208 | Calculus for Computer Science I                              |
|         | (Prerequisite: MTH 215)                                      |
| CSC 209 | Calculus for Computer Science II                             |
|         | (Prerequisite: CSC 208)                                      |
| SCI 104 | General Physics*   |
|         | (Prerequisites: two years of high school algebra and MTH 204 |
|         | or 215 or 216A/B)  |
|         |  |

All students are required to demonstrate that their knowledge of Linear Systems and Signals and their knowledge of Probability and Random Processes in Engineering is current. This can be done either by taking and passing the following two courses:

- WCM 301 Linear Systems and Signals (Prerequisites: CSC 209 and SCI 104)
- WCM 302 Probability and Random Processes in Engineering (Prerequisites: CSC 209 and SCI 104)

or by passing a Wireless Communications Foundations Examination. If a student passes the part of the Foundation Examination dealing with one of these areas, but not the other, they will only be required to take the course corresponding to that part of the Foundation Examination that was not passed.

Lead Faculty may waive any prerequisites based on verifiable documented proof that the student has acquired the equivalent learning.

### **Core Requirements**

(12 courses; 54 quarter units)

Students are encouraged to take the following courses in the order of presentation. Courses WCM 601 and WCM 602 are the foundation courses that must be completed before taking any other courses and the project courses.

WCM 601 Analog and Digital Communications Fundamentals (Prerequisites: WCM 301 and WCM 302 or passing grade in Wireless Communications Foundations Examination)

| WCM 602  | Wireless Communications: Principles and Practice            |
|----------|---|
|          | (Prerequisites: WCM 301 and WCM 302 or passing grade in     |
|          | Wireless Communications Foundations Examination and         |
|          | WCM 601))   |
| WCM 603  | Wireless Networking: Architectures, Protocols and           |
|          | Standards   |
|          | (Prerequisite: WCM 602)                                     |
| WCM 604  | Coding and Modulation for Wireless Communications           |
|          | (Prerequisite: WCM 603)                                     |
| WCM 605  | Information, Privacy, and Security in Wireless Systems      |
|          | (Prerequisite: WCM 604)                                     |
| WCM 606  | CDMA Wireless Standards and Applications                    |
|          | (Prerequisite: WCM 604)                                     |
| WCM 607  | Third and Fourth Generation Wireless Networks (3G           |
|          | and 4G)   |
|          | (Prerequisite: WCM 604)                                     |
| WCM 608  | Engineering Software for Wireless System Development        |
|          | (Prerequisite: WCM 604)                                     |
| WCM 609  | Communication Systems Modeling with Wireless                |
|          | Applications  |
|          | (Prerequisite: WCM 604)                                     |
| WCM 612  | Current Topics in Wireless Economics                        |
|          | (Prerequisites: WCM 601 through WCM 609)                    |
| WCM 611A | Master's Research Project I                                 |
|          | (Prerequisites: Completion of a minimum of eight out of ten |
|          | courses WCM 601 through WCM 609, WCM 612)                   |
| WCM 611B | Master's Research Project II                                |
|          | (Prerequisite: WCM 611A)                                    |

## **Certificate Programs**

### • Graduate Certificate in Industrial

Engineering (770-000-895)

The Industrial Engineering certificate program prepares graduates for positions in several areas that require problem-solving expertise to improve manufacturing processes, quality, productivity, and customer service. Students completing 22.5 quarter units of the following courses earn an Industrial Engineering certificate, and the specialty is recorded on the student's permanent university transcript. This specialty is administered through the Office of the Dean of Engineering and Technology. The lead faculty reviews each student's coursework prior to admitting a student into this program. Based on the student's performance, both the coordinator and the dean determine whether the student should be awarded with a certificate of achievement.

### **Certificate Requirements**

(5 courses; 22.5 quarter units)

| IEM 602 | Managing Production | on Planning and | Control |
|---------|---------------------|-----------------|---------|
|---------|---------------------|-----------------|---------|

- IEM 603 Managing Facilities and Planning Layout
- IEM 604 Ergonomics and Occupational Safety
- MNS 601 Statistics for Business
- IEM 605 Engineering Applications of Operations Research (*Prerequisite: MNS 601*)

## ● Undergraduate Certificate in Information Technology Management √<sup>⊕</sup>

### (670-000-465)

Faculty Advisor: John Bugado • (858) 642-8407 • jbugado@nu.edu

This certificate program offers students interested in technologyrelated careers the opportunity to develop the professional expertise to apply and manage technology in a variety of situations. With this certificate, students can pursue careers in fields such as marketing, information management, customer service, data management, and sales. Students who later want to pursue a baccalaureate degree can apply some or all of the credits awarded in the certificate program toward their degree assuming they meet the GPA and other requirements of that program.

### **Certificate Prerequisite**

(1 course; 4.5 quarter units)

ITM 210 Introduction to Information Technology

### **Certificate Requirements**

(5 courses; 22.5 units)

| ITM 320 | Information Technology Management |
|---------|-----------------------------------|
|         |                                   |

- ITM 340 IT Client Environment using Windows
- ITM 420 Local Area Networks
- ITM 430 Wide Area Networks
- ITM 440 Database Systems Concepts and Data Modeling

### Elective

(1 course, 4.5 quarter units)

Choose one of the following:

| ITM 345 | IT Server Environment using Linux                 |
|---------|---|
| ITM 434 | Wireless Local Area Network (WLAN) Administration |
| ITM 470 | Information Security Management                   |

### Graduate Certificate in Lean Six Sigma (Green Belt and Black Belt)

(770-000-896)

Faculty Advisor: Shekar Viswanathan • (858) 642-8416 • sviswana@nu.edu

Lean Six Sigma is an integration of Six Sigma and Lean for an enterprise to achieve more effective and efficient operations. Six Sigma is a Quality Improvement methodology structured to reduce product or service failure rates to a negligible level. To achieve six sigma quality levels, the Six Sigma process encompasses all aspects of a business, including management, service delivery, design, production and customer satisfaction. Six Sigma companies typically spend less than 5 percent of their revenues addressing and repairing quality problems. Lean Enterprise is a structured, disciplined process for improving the efficiency of operations by identifying and eliminating non-value added activities and streamlining value-added activities. Organizations that deploy Lean Six Sigma routinely realize dramatic improvements in quality, productivity, inventory levels, customer satisfaction and revenue. Recognizing these benefits many businesses are hiring certified professionals in this area to make improvement of their processes. This Green Belt and Black Belt certification program offers an overview of the Lean Six Sigma concepts and tools including Lean Six Sigma deployment practices, project development, and the DMAIC, DMALC and DFLSS problem-solving approach. The program is administered through the Office of the Dean of Engineering and Technology in close collaboration with the applied engineering department. Before taking any of the courses in this program, students are strongly advised to contact the lead faculty in the area of concentration for a brief interview by phone or personal visit to review student's career objectives and provide guidance.

### **Certification Prerequisites**

(2 courses; 9 quarter units)

Candidates for the certificate program must possess a Bachelor's degree in engineering, engineering technology, or physical sciences, or a closely related area from an accredited university. Interested

students from other disciplines may be admitted to the program but may be required to complete additional courses. Non-degree students will not be allowed to enter this certificate program. Those who have a general non-science and non-engineering degree would be considered for admission based on relevant experience and the following minimum program prerequisites:

MGT 409 C Principles of Management and Organization MNS 205 Introduction to Quantitative Methods and Statistics (*Prerequisite: Placement Evaluation*)

These courses may be waived if their equivalents have been completed at the undergraduate level with a grade of "C" or better.

### **Required Courses**

(5 courses; 22.5 quarter units)

### Green Belt Program Courses

(2 courses; 9 quarter units)

| LSS 601 | Fundamentals of Process Analysis and Optimization |
|---------|---|
| LSS 602 | Operational Efficiency and Cost Effectiveness     |

### **Black Belt Program Courses**

(2 courses; 9 quarter units)

| LSS 603 | Fundamentals of Leading and Managing Continuous |
|---------|---|
|         | Measurable Improvement                          |
| LSS 604 | Advanced Topics in Process Analysis             |

### Green Belt and Black Belt Certification Course

(1 course; 4.5 quarter units)

LSS 605 Six Sigma Project Practicum

### • Graduate Certificate in Project

### Management<sup>®</sup>

(770-000-893) (5 courses; 22.5 quarter units)

From small companies to giant global institutions, project managers are fueling much of the successful development of exciting business enterprises. Talented and knowledgeable project managers command the best assignments, salaries, other compensation, and bonuses. They are the future leaders and entrepreneurs. Good project managers are not born but are nurtured from a combination of experience, time, talent, and training. Successful projects don't happen spontaneously; they require preparation, planning, and organization. This certificate program is designed to provide systematic training to students pursuing a project management certification offered by Project Management Institute. To earn this certificate, students are required to take the following courses in the order specified below.

- ENM 601 Engineering Project Management
- ENM 602 Management of Risk, Contracts, and Legal Issues
- PME 601 Planning, Performing and Controlling Projects
- (Prerequisites: ENM 601, and ENM 602)
- PME 602 Managing Engineering Competencies and Skills (Prerequisites: ENM 601, and ENM 602)
- PME 604 Project Financing and Associated Financial Management (Prerequisites: ENM 601, and ENM 602)

# ● Graduate Certificate in Security and Safety Engineering <sup>2</sup>

### (770-000-894)

(4 courses; 18 quarter units)

The Security and Safety Engineering certificate program prepares graduates for positions in several areas of security and safety engineering. Students completing 18 quarter units of the following courses can earn a Security and Safety Engineering certificate and the specialty would be recorded on the students' university transcript. This program academically trains students to appear for "Certified Safety Professional" (CSP) certification administered by the American Society of Safety Engineers' and the American Society of Industrial Security's (ASIS) Certified Protection Professional (CPP) exam. This specialty is administered through the Office of the Dean of Engineering and Technology. The lead faculty of the program reviews each student's coursework prior to permitting him/her into this program. Based on the student's performance, the coordinator and the dean determine whether the student is eligible to receive a certificate of achievement.

| SSE 602 | Design and Evaluation of a Modern Safety Program |
|---------|--|
| SSE 603 | Introduction to Security Engineering             |
| SSE 604 | Security Engineering - Planning and Design       |
|         | (Prerequisite: SSE 603)                          |
| SSE 609 | Planning and Responding to Terrorism             |
|         |  |

### ● Graduate Certificate in Supply Chain Management and e-Logistics ∽ ⊕

(770-000-892) (5 courses; 22.5 quarter units)

From small companies to giant global institutions, the concept of integration within a business and between businesses has gained increased validity. There has been a growing recognition that supply chain management and e-Logistics help achieve the twin goals of cost reduction and service enhancement. Supply Chain Management and e-Logistics have in turn been impacted and driven by e-business strategies and technologies. This program is designed to provide comprehensive academic training on best practices in a dynamic and increasingly global economic business environment.

| SCL 601 | Supply Chain Management Fundamentals                  |
|---------|---|
| SCL 602 | Supply Chain Management - Strategies, Design and      |
|         | Implementation  |
|         | (Prerequisite: SCL 601)                               |
| SCL 603 | Logistics Management Fundamentals                     |
| SCL 604 | Advanced Supply Chain Logistics Management            |
|         | (Prerequisite: SCL 603)                               |
| SCL 605 | Technology and Infrastructure Requirements for Supply |
|         | Chain Management and e-Logistics                      |
| or      |   |
| CIS 607 | System Integration and Client Server Computing        |
|         | (Prerequisite: CIS 601)                               |
|         |   |

# **School of Health**

# and Human Services

Dean, Michael Lacourse Ph.D., Human Performance and Educational Inquiry Methodology Indiana University

| Degrees Offered               | 230 |
|-------------------------------|-----|
| Faculty                       | 230 |
| Undergraduate Degree Programs | 231 |
| Nursing Programs              | 245 |
| Graduate Degree Programs      | 254 |
| Certificate Program           | 257 |



The University of Values

# Degree Programs Offered

### **Undergraduate Degrees**

### Associate of Arts

with a Concentration in: Medical Billing, Coding, and Information Technology with Majors in: Health Care Administration Rehabilitative Counseling

### Associate of Science

with Majors in: Community Healthcare Worker Nursing Nursing (Licensed Vocational Nurse/ Licensed Practical Nurse to ASN)

### **Bachelor of Science**

with Majors in:
Allied Health
Community Health
Health Education
Health Education with a Preliminary Single
Subject Credential (CA)
Nursing (Generic Entry)
Nursing (Licensed Vocational Nurse/
Licensed Practical Nurse to BSN
Nursing (RN Completion)
Nursing (Accelerated Post-Bachelor Degree)
Physical Education
Physical Education with Preliminary Single
Subject Credential (CA)

### Graduate Degrees

### Master of Arts

with a Field of Study in: Health Education

### Master of Healthcare Administration ~

### Master of Science

with Fields of Study in Clinical Regulatory Affairs Community Health

### **Certificate Program**

### LVN "30 Unit" Option Certificate

 ${}^{\circ}\!\!\!\!\!\!\!\!\!\!\!\!\!\!^{\circ}}$  denotes program also offered or partially offered online.

Note: Not all online programs or courses are offered in entirety via Internet.

Note: Not all courses or programs listed in this catalog are available at every campus.

Various undergraduate minors are available in some degree programs.

FOR FURTHER INFORMATION

contact The School of Health and Human Services in San Diego at (800) NAT-UNIV

fax: (858) 642-8781

e-mail: shhs@nu.edu

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## **Mission Statement**

The mission of the School of Health and Human Services is to provide a learning-centered environment that supports the education and preparation of health professionals in becoming innovative, caring practitioners and leaders in interdisciplinary settings. Utilizing multiple frameworks that respect and promote the integration of teaching, research, policy, and community service in multicultural settings, the School's faculty and students will enter into a partnership to maintain relevant, accessible, high-quality programs to meet community health needs.

## **Undergraduate Degrees**

## ■ ASSOCIATE OF ARTS IN HEALTHCARE ADMINISTRATION

(600-303)

Faculty Advisor: Bart Chapman • (858) 642-8391 • bchapman@nu.edu

The Associate of Arts in Healthcare Administration is designed to give students an introductory yet solid foundation in healthcare management principles and practices, marketing, accounting and budgeting, human resources administration, law and ethics, health economics, and health information systems.

The prevalence of integrated healthcare delivery systems necessitates the need for individuals who plan, direct, coordinate and streamline health services. With the sustained growth and diversification of the health industry, opportunities are available for these healthcare administrators in physicians, chiropractors, home health services, and ambulatory care clinics. Graduates of this program will help direct and assist healthcare agencies towards the realization of their mission and goals and provide assistance in business strategies and oversee the activities of a number of facilities in healthcare systems.

### **Program Outcomes**

The associate degree will prepare the graduate to:

- Lead and direct an integrated delivery system like physician's offices, ambulatory care clinics and home-health based agencies and elder day care centers.
- Interpret financial reports and determine business viability.
- Implement proper documentation in the medical office.
- Recognize marketing programs specific to healthcare.
- Employ relevant ethical and legal practices.
- Identify basic management practices of healthcare professionals and staff.

### **Degree Requirements**

To receive the AA degree, students must complete at least 90 quarter units, 31.5 of which must be taken in residence at National University. Students are urged to meet English requirements as early as possible in their college studies to avoid serious difficulties in other coursework. In the absence of transfer credit, students may need to take additional electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission requirements for specific information regarding admission and evaluation. The following courses are specific degree requirements.

### **General Education Requirements**

(14 courses; 57 quarter units)

### AREA A: ENGLISH COMMUNICATION CATEGORY 1 – Writing

(6 quarter units)

| ENG 100 | Effective College English I  |
|---------|------------------------------|
| ENG 101 | Effective College English II |
|         | (Prereauisite: ENG 100)      |

## **CATEGORY 2 – Speech and Communication** (4.5 quarter units)

(4.5 quarter units)

COM 200 Effective Communication

## AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(9 quarter units)

 MTH 210 Introduction to Probability and Statistics (Prerequisite: Placement Evaluation)
 MNS 205 Introduction to Quantitative Methods for Business (Prerequisite: Placement Evaluation)

## **AREA C: INFORMATION LITERACY AND TECHNOLOGY** (4.5 quarter units)

ILR 260 Information Literacy and Report Writing (Prerequisites: ENG 100/101)

### AREA D: ARTS AND HUMANITIES

(4.5 quarter units)

PHL 100 Introduction to Philosophy ( Prerequisites: ENG 100/101)

## **AREA E: SOCIAL AND BEHAVIORAL SCIENCES** (9 quarter units)

| PSY 100 | Introduction to Psychology    |
|---------|-------------------------------|
| SOC 100 | Principles of Sociology $(+)$ |

100 Principles of Sociology (+) (Prerequisites: ENG 100/101)

### AREA F: PHYSICAL AND BIOLOGICAL SCIENCE

(6 quarter units required)

| Note: One science lab | is required | at 1.5 quarter units) |
|-----------------------|-------------|-----------------------|
|-----------------------|-------------|-----------------------|

| SCI 1 | 100 | Survey | of | Bioscience |
|-------|-----|--------|----|------------|
|       |     |        |    |            |

SCI 100A Survey of Bioscience Laboratory (1.5 quarter units) (Prerequisite: SCI 100)

### AREA G: MODERN LANGUAGES

(9 quarter units)

| (Prerequisite: LAS 100 |
|------------------------|
| •                      |

### AREA A - G: GENERAL EDUCATION

(4.5 quarter units)

As part of the General Education requirements students must complete at least 4.5 quarter units in diversity enriched coursework. A plus (+) indicates a diversity enriched offering.

### **Requirements for the Major**

(8 courses; 36 quarter units)

| HLT 200 | Introduction to Finance and Accounting          |
|---------|---|
|         | (Prerequisite: MNS 205)                         |
| HLT 210 | Quality in Healthcare                           |
| HLT 220 | Healthcare Information System                   |
|         | (Prerequisite: ILR 260))                        |
| HLT 230 | Organizational Behavior                         |
|         | (Prerequisite: MTH 210)                         |
| HLT 240 | Healthcare Marketing                            |
| HLT 250 | Healthcare Management and Leadership            |
|         | (Prerequisite: HLT 230)                         |
| GER 310 | Healthy Aging                                   |
| HSC 300 | Legal and Ethical Issues and Health Professions |

## ■ ASSOCIATE OF ARTS IN REHABILITATIVE COUNSELING

(600-302)

Faculty Advisor: Contact the School of Health and Human Services at 1-800-NAT-UNIV

The Associate of Arts in Rehabilitative Counseling degree is designed to meet state requirements for certification of alcohol and drug counselors. This program meets the requirements of The California Association of Alcoholism and Drug Abuse Counselors (CAADAC), a certification body recognized by the state of California. This is a degree shared by the Division of Extended Learning and the School of Health and Human Services.

For complete information on the CAADAC certification, or to order a CAADAC Handbook visit www.caadac.org or call (916) 368-9412.

### **Program Outcomes**

Upon successful completion of the Associate of Arts in Rehabilitative Counseling degree program, students will be able to:

- Recognize the importance of individual differences by gaining knowledge about personality, cultures, lifestyles, gender, special needs, and any of the factors influencing client behavior in order to provide assessment that are sensitive to the uniqueness of the individual.
- Apply pharmacological knowledge to the implementation of selected counseling strategies by incorporating substance specific information to improve the quality and continuity of care.
- Using interview techniques, gather and document relevant substance use history and related information from the client in order to obtain current status and history.
- Maintain information about community resources and services by establishing contact with other services providers in order to evaluate the appropriateness of referring the client.
- Make an accurate evaluation by documenting client's psychological, social, and physiological signs and symptoms of substance use disorders in order to formulate a treatment plan.
- Using current literature and research findings, deliver culturally relevant formal and informal education programs for clients and significant/concerned others to raise awareness of the prevention, treatment, and recovery processes for substance use disorders.
- Recognize signs and symptoms of co-existing medical, mental, emotional, and/or behavioral disorders and conditions by interpreting observable behavior, laboratory data, and results of interviews and testing in order to determine if the client may be experiencing problems in addition to substance use disorders.
- Evaluate the effectiveness of treatment approaches used by engaging in a systematic and personal review of the process in

order to improve the quality of services

- Behave in an ethical manner by adhering to established professional codes of ethics and standards of practice in order to promote the best interest of the client.
- Be introduced to the supervised experience in clinical skills required of alcohol and drug abuse counselors.

### **Degree Requirements**

To receive the degree, students must complete at least 90 quarter units, 31.5 of which must be taken in residence at National University. Students are urged to meet English requirements as early as possible in their college studies to avoid serious difficulties in other coursework. Refer to the section on undergraduate admission requirements for specific information regarding application, placement evaluation and matriculation.

### **General Education Requirements**

### AREA A: ENGLISH COMMUNICATION

### **CATEGORY 1 – Writing**

(10.5 quarter units required)

| ENG 100 | Effective College English I (3.0 quarter units)  |
|---------|--|
|         | (Prerequisite: Placement Exam)                   |
| ENG 101 | Effective College English II (3.0 quarter units) |
|         | (Prerequisite: ENG 100)                          |
| ENG 240 | Advanced Composition                             |
|         | (Prerequisite: ENG 100/101)                      |

(No 300-level English course may fulfill this requirement)

### **CATEGORY 2 – Speech and Communications**

(4.5 quarter units required)

| COM 100 | Introduction to Communications |
|---------|--------------------------------|
| or      |                                |
| COM 200 | Effective Communication        |

## AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(4.5 quarter units required)

- MTH 210 Introduction to Probability and Statistics (Prerequisite: Placement Evaluation) (Prerequisite: MTH 216A)
- **AREA C : INFORMATION LITERACY AND TECHNOLOGY** (4.5 quarter units required)
- ILR 260 Information Literacy and Report Writing (*Prerequisites: ENG 100/101*)

### AREA D: ARTS AND HUMANITIES

(4.5 quarter units required)

| PHL 100 | Introduction to Philosophy  |
|---------|-----------------------------|
|         | (Prerequisite: ENG 100/101) |

### AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(9. quarter units required)

| PSY 100 | Introduction to Psychology  |
|---------|-----------------------------|
| SOC 100 | Principles of Sociology (+) |
|         | (Prerequisite: ENG 100/101) |

### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(6 quarter units required)

| (Note: One science lab is required at 1.5 quarter units) |   |
|--|---|
| SCI 201  | Human Anatomy and Physiology I                    |
|  | (Recommended: prior completion of SCI 100 & 100A, |
|  | SCI 101 & 101A, or equivalent courses)            |
| SCI 201A   | Human Anatomy and Physiology Laboratory I (1.5    |
|  | quarter units)                                    |
|  | (Prerequisite: SCI 201)                           |

### AREA G: MODERN LANGUAGE

(9 quarter units required)

### AREA A-G: GENERAL EDUCATION

(4.5 quarter units required)

### **Requirements for the Major**

(10 courses; 42 quarter units)

| ADC 200 | Sociological Perspectives on Alcoholism and Drug |
|---------|--|
|         | Addiction  |

- ADC 210 Physiological and Pharmacological Aspects of Substance Abuse
- ADC 220 Counseling Techniques/Practical Applications
- ADC 230 Counseling Special Populations
- ADC 240 Treatment Approaches for Alcoholism and Substance Abuse Counselor
- ADC 250 Alcoholism and Substance Abuse prevention and Intervention Education
- ADC 260 Chemical Dependency and Psychiatric Illness
- ADC 270 Legal and Ethical Practices for Drug and Alcohol Counselors
- ADC 280 Personal and Professional Growth (1.5 quarter units)

## ADC 299 Practicum – Field Work 255 Hours

## ■ ASSOCIATE OF ARTS WITH A CONCENTRATION IN MEDICAL BILLING, CODING AND INFORMATION TECHNOLOGY

(600-198)

Faculty Advisor: Contact the School of Health and Human Services at 1-800-NAT-UNIV

The Associate of Arts degree with a concentration in medical billing, coding and information technology degree is designed to prepare students in one of the ten fastest growing career fields in the nation, according to the U.S. Department of Labor. Through this program students will be prepared for the healthcare workforce and to continue their educational path. Students will learn the essential skills to help prepare them for a career in this growing healthcare field. Students will be prepared to sit for the National Certified Insurance & Coding Specialist (NCICS) Exam, the American Health Information Management Association (AHIMA), and/or Certified Coding Associate, CCA exam.

### Program Outcomes

The medical billing, coding and information technology concentration prepares the graduate to be able to:

- Classify the organ systems of the body and demonstrate a strong knowledge of medical terminology.
- Demonstrate orally and in writing the correct use of diagnostic and procedural coding.
- Differentiate government paid health care services and insurance programs.
- Use professional standards in medical billing and coding practice and maintain a commitment to continual learning.

- Demonstrate orally and in writing industry practice and electronic claims with compliance issues.
- Demonstrate the ability to correctly use and understand the concepts and techniques for HCFA-1500 form.
- Apply professional standards in confidentiality of medical records.
- Demonstrate techniques and use complex technologies in an appropriate manner; CPT-4 and ICD-9 coding, HCFA-1500, UB92 and the billing requirements for commercial insurance, Blue Cross/Blue Shield, TRICARE/CHAMPUS, Medi-Cal and Workers' compensation.
- Perform in ethically sensitive ways regarding regulations collecting from insurance companies.

### **Degree Requirements**

To receive the AA degree, students must complete at least 90 quarter units, 31.5 must be taken in residence at National University. Of the 90 units required, 70.5 must fall into the areas of general education listed below. The other 19.5 quarter units can be comprised of core courses. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

### **General Education Requirements**

The general education program consists of a minimum of 70.5 quarter units. Of the 70.5 quarter units, students must complete at least 4.5 quarter units at the upper-division level and 4.5 quarter units in diversity enriched coursework.

### AREA A: ENGLISH COMMUNICATION

(15 quarter units)

or

### CATEGORY 1 – Writing

(10.5 quarter units required)

| (       |  |
|---------|--|
| ENG 100 | Effective College English I (3.0 quarter units)  |
| ENG 101 | Effective college English II (3.0 quarter units) |
|         | (Prerequisite: ENG 100)                          |

- ENG 240 Advanced Composition (Prerequisite: ENG 100/101)
  - (Frerequisite. LNG 100/1
- ENG 334A Technical Writing (Prerequisites ENG 100/101)

## **CATEGORY 2** – **Speech and Communication** (4.5 quarter units required)

COM 200 Effective Communication

## AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(4.5 quarter units required)

### AREA C: INFORMATION LITERACY

(4.5 quarter units required)

ILR 260 Information Literacy and Report Writing (Prerequisites: ENG 100/101)

### AREA D: ARTS AND HUMANITIES

(13.5 quarter units)

### AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(13.5 quarter units required)

| PSY 100 | Introduction to Psychology   |
|---------|------------------------------|
| SOC 100 | Principles of Sociology (+)  |
|         | (Prerequisites: ENG 100/101) |

#### Choose one of the following:

| Choose one | or the following.                    |
|------------|--------------------------------------|
| COM 380    | Democracy in the Information Age [+] |
|            | (Prerequisites: ENG 100/101)         |
| ECO 203    | Principles of Microeconomics         |
| ECO 204    | Principles of Macroeconomics         |
| HIS 220A   | History of the United States I [+]   |
|            | (Prerequisites: ENG 100/101)         |
| HIS 220B   | History of the United States II [+]  |
|            | (Prerequisites: ENG 100/101)         |
| HIS 300    | Foundations of Western Civilization  |
|            | (Prerequisites: ENG 100/101)         |
| HIS 350    | Cultural Diversity [+]               |
|            | (Prerequisites: ENG 100/101)         |
| POL 201    | American Government and Politics     |
|            | (Prerequisites: ENG 100/101)         |
| SOC 260    | Cultural Anthropology                |
|            | (Prerequisites: ENG 100/101)         |
|            | -                                    |

### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(12 quarter units)

| SCI 201   | Human Anatomy and Physiology I                         |
|-----------|--|
|           | (Recommended: prior completion of SCI 100 & 100A,      |
|           | SCI 101 & 101A, or equivalent courses.)                |
| SCI 201 A | Human Anatomy and Physiology Laboratory I (1.5         |
|           | quarter units)   |
|           | (Prerequisite: SCI 201)                                |
| SCI 202   | Human Anatomy and Physiology II                        |
|           | (Recommended: prior completion of SCI 201 & 201A,      |
|           | SCI 100 & 100A, SCI 101 & 101A, or equivalent courses) |
| SCI 202 A | Human Anatomy and Physiology Laboratory II (1.5        |
|           | quarter units)   |
|           | (Prerequisite: SCI 202)                                |
|           |  |

### AREA G: MODERN LANGUAGE

(9 quarter units)

See General Education section of the catalog for a list of courses in this Area

### **Requirements for the Concentration**

(5 courses 22.5 units)

| MBL 200 | Medical Terminology                                   |
|---------|---|
|         | (Prerequisites: SCI 201, SCI 201A, SCI 202, SCI 202A) |
| MBL 210 | Medical Insurance I                                   |
|         | (Prerequisites: MBL 200)                              |
| MBL 220 | Medical Insurance II                                  |
|         | (Prerequisites: MBL 210)                              |
| MBL 230 | Medical Insurance III                                 |
|         | (Prerequisites: MBL 220)                              |
| HSC 300 | Legal and Ethical Issues and Health Professions       |
|         | 8   |

### **Recommended Electives**

| ITM 210 | Introduction to Information Technology |
|---------|--|
| ITM 320 | Information Technology Management      |

1 320 Information Technology Management (*Prerequisite: ITM 210*)

## ■ ASSOCIATE OF SCIENCE IN COMMUNITY HEALTHCARE WORKER

(602-126)

Faculty Advisor: Contact the School of Health and Human Services at 1-800-NAT-UNIV

The Associate of Science in Community Healthcare Worker is designed to offer a tiered program to higher education in the field of community health. It will serve as a pathway to develop leadership and advocacy skills of indigenous/grassroots health workers. To address areas of concern, the students will be required to evaluate needs of the community, establish priority areas and focus, and develop educational materials to address areas of concern. Health advising will target health maintenance, prevention, and wellness rather than treatment. Subscribing to the tenet that healthcare is a human right rather than a privilege, the indicator of a healthy nation is a healthy community. Community Healthcare Workers (CHW) provide health advising, intakes and referrals, carry out client orientations, and advocates for the community. Under the guidance of the primary health provider and collaborating with the healthcare team, CHWs will approach health issues proactively.

This program is designed for the entry-level health workers and onsite individuals to gain knowledge, skills, and confidence in the delivery of primary and preventive healthcare. With the holistic curriculum, the student is prepared to view the patient's concerns as a human being rather than an isolated system or anatomical organ.

### **Program Outcomes**

The Associate of Science in Community Healthcare Worker trains the graduate to:

- Demonstrate oral and written skills in client's health assessment, management strategies, and referrals to appropriate services.
- Discuss health promotion, disease prevention, and wellness programs for all age groups.
- Explain the importance of screening tests for the most common communicable diseases and early detection of cancer and other illnesses.
- Discuss the importance of adherence to safety and infection control standards and policies.
- Demonstrate organizational skills, problem solving, and conflict resolution.
- Recognize the individuality of clients and cultural diversity and their effect on client care.
- Apply anatomical and physiological principles to disease identification and intervention.
- Commence communication and contact with high risk population for health education thus gaining their trust and confidence.
- Translate the goals of Healthy Families 2010 in lifestyle modification of clients.
- Discuss ethical and legal repercussions of decisions and alternatives for the community members.
- Translate health priorities and goals to the community ensuring that privacy and confidentiality concerns are safeguarded.
- Recognize the roles of other healthcare professionals and serve as a bridge for them to understand the needs of the community.

### **Degree Requirements**

To receive the associate degree, students must complete at least 90 quarter units, 31.5 of which must be taken in residence at National University. Students are urged to meet English requirements as early as possible in their college studies to avoid serious difficulties in other coursework. In the absence of transfer credit, students may need to take additional electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission requirements for specific information regarding admission and evaluation. The following courses are specific degree requirements.

### **General Education Requirements**

(14 courses; 57 quarter units)

### AREA A: ENGLISH COMMUNICATION

### **CATEGORY 1 – Writing**

(6 quarter units required)

| ENG 100 | Effective College English I  |
|---------|------------------------------|
| ENG 101 | Effective College English II |
|         | (Prerequisite: ENG 100)      |

### CATEGORY 2 – Speech and Communication

(4.5 quarter units required)

COM 200 Effective Communication

## AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(4.5 quarter units required)

MTH 210 Introduction to Probability and Statistics (*Prerequisite: Placement Evaluation*)

### AREA C: INFORMATION LITERACY

(4.5 quarter units required)

ILR 260 Information Literacy and Report Writing (Prerequisites: ENG 100/101)

### **AREA D: ARTS AND HUMANITIES**

(4.5 quarter units required)

PHL 100 Introduction to Philosophy (Prerequisites: ENG 100/101)

### AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(9 quarter units required)

| PSY 100 | Introduction to Psychology    |
|---------|-------------------------------|
| SOC 100 | Introduction to Sociology (+) |
|         | (Prerequisites: ENG 100/101)  |

### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(6 quarter units required)

| SCI 100  | Survey of Bioscience                                |
|----------|---|
| SCI 100A | Survey of Bioscience Laboratory (1.5 quarter units) |
|          | (Prerequisite: SCI 100)                             |

### AREA G: MODERN LANGUAGES

(13.5 quarter units required)

| LAS 100 | Spanish I               |
|---------|-------------------------|
| LAS 200 | Spanish II              |
|         | (Prerequisite: LAS 100) |
| LAS 300 | Spanish III             |
|         | (Prerequisite: LAS 200) |

### **AREA A - G: GENERAL EDUCATION**

(4.5 quarter units required)

As part of the General Education requirements students must complete at least 4.5 quarter units in diversity enriched coursework. A plus (+) indicates a diversity enriched offering.

#### **Requirements for the Major**

(8 courses; 36 quarter units)

| CMM 200 | Community Outreach, Advocacy and Organization   |
|---------|---|
| CMM 210 | Complementary and Alternative Medicine          |
| CMM 220 | Environmental and Occupational Hazards          |
| CMM 230 | Issues in Death, Dying and the Human Experience |
| CMM 240 | Health Promotion and Lifestyle Modification     |
| CMM 250 | Spanish for Healthcare Professionals            |
| HSC 300 | Legal and Ethical Issues and Health Professions |
| GER 310 | Healthy Aging                                   |
|         |   |

### ■ BACHELOR OF SCIENCE

#### (620)

Faculty Advisor: Contact the School of Health and Human Services at 1-800-NAT-UNIV

### **General Education Program Requirements**

The general education program consists of a minimum of 70.5 quarter units. Of the 70.5 quarter units, students must complete at least 4.5 quarter units at the upper-division level and 4.5 quarter units in diversity enriched coursework. A plus {+} indicates a diversity enriched offering. All undergraduate students working toward any associate or bachelor's degree must meet the University diversity requirement.

National University has general education requirements in the following eight areas:

### AREA A: ENGLISH COMMUNICATION

(Minimum 15 quarter units)

## AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

### AREA C: INFORMATION LITERACY

(Minimum 4.5 quarter units)

### AREA D: ARTS AND HUMANITIES

(Minimum 13.5 quarter units)

## **AREA E: SOCIAL AND BEHAVIORAL SCIENCES** (Minimum 13.5 quarter units)

### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(Minimum 6 quarter units required {Note: one science lab is required.})

### AREA G: MODERN LANGUAGE

(Minimum 9 quarter units)

### AREA A-G: GENERAL EDUCATION

(Minimum 4.5 quarter units)

Courses taken to achieve minimum levels of collegiate-level competency in the areas of writing and mathematical concepts and systems do not satisfy any portion of the general education requirement.

## ◆ Major in Allied Health (620-459)

Faculty Advisor: Bart Chapman • (858) 642-8391 • bchapman@nu.edu

Allied health refers to occupations that support, aid and increase the efficiency of the physician, dentist or primary clinical specialist. Allied health professionals are involved with the delivery of health

or related services pertaining to the identification, evaluation and prevention of diseases and disorders; dietary and nutrition services; rehabilitation and health systems management, among others.

The Bachelor of Science in Allied Health degree post-professional program provides a broad-based foundation of professional, ethical, legal, health policy, issues and trends in healthcare, health promotion and disease prevention, health education, research and evidence based practice and data base, case, and health systems management.

The program is designed to articulate with allied health professional programs at community colleges to provide graduates the opportunity to advance in the allied health profession, meet societal and healthcare delivery demands, and assume leadership and/or supervisory positions. The BS degree will prepare graduates to work in a variety of settings with diverse patients, families, and communities as well as pursue graduate education in the healthcare field.

### Program Outcomes

The Allied Health major prepares the graduate to be able to:

- Demonstrate orally and in writing, an understanding of the determinants of health such as environment, socioeconomic conditions, behavioral healthcare, and human genetics.
- Demonstrate orally and in writing, an understanding of the value and importance of the functions of coordinated, comprehensive, and continuous healthcare.
- Understand and use systematic observations, documentation, and other effective assessment strategies in a responsible manner in partnership with patients, families, and other professionals to positively maintain and promote health behavior and prevent disease.
- Assist patients, families and communities to participate actively in decisions regarding healthcare.
- Use increasingly complex technologies in an appropriate and cost-effective manner.
- Demonstrate orally and in writing, an understanding of the value of operations in the healthcare system from a broad economic, oversight, management, political, social, legal, system, and organizational perspective.
- Manage and use large volumes of scientific, technological, and patient information in a manner that delivers effective outcomesbased clinical care in the context of community and systems needs.
- Perform in ethically sensitive ways and provide education and counseling for clients, families, and communities in situations where ethical issues arise.
- Appreciate the growing diversity of the population and the need to understand health, disease prevention, and healthcare through different cultural values.
- Work effectively as an interdisciplinary team member in organized settings that emphasize the integration of care, promotion of health, and prevention of disease.
- Apply the essential concepts, inquiry tools, collection, evaluation, and dissemination of allied health practice data.
- Use professional standards in healthcare practice and maintain a commitment to continual learning.

### **Degree Requirements**

To receive a Bachelor of Science degree with a Major in Allied Health, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upperdivision level. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

### Prerequisite for the Major

To enroll in this degree program a student must hold an associate's degree in an Allied Health field completed at a regionally accredited institution. National University will also accept students who hold such a degree from certain nationally accredited institutions. Appropriate Allied Health programs may include respiratory therapist, orthopedic technician, cardiovascular technologist, and dental hygienist. Transfer units will be applied as per general university catalog policies.

### **Requirements for the Major**

(10 courses; 45 quarter units)

| HSC 300 | Legal and Ethical Issues and Health Professions       |
|---------|---|
| HSC 310 | Issues and Trends in Health Care                      |
|         | (Prerequisite: HSC300)                                |
| NSG 322 | Introduction to Biomedical Statistics                 |
| GER 310 | Healthy Aging   |
| HSC 330 | Health Education and Health Promotion                 |
| HSC 400 | Management for Health Professionals                   |
|         | (Prerequisite: HSC 310)                               |
| HSC 410 | Informatics for Health Professionals                  |
|         | (Prerequisite: HSC 400)                               |
| HSC 420 | Allied Health Research                                |
|         | (Prerequisites: NSG 322)                              |
| HSC430  | Case and Outcome Management                           |
|         | (Prerequisites: HSC 410 and HSC 420)                  |
| HSC 440 | Allied Health Capstone Project                        |
|         | (Prerequisites :Completion of the major requirements) |
|         |   |

### **Upper-Division Electives**

(6 courses; 27 quarter units)

Students must complete a minimum of 27 quarter units (6 courses) of electives to fulfill the upper-division unit requirements for the Bachelor of Science in Allied Health. In addition, two of the General Education courses should be at the upper-division level. A plus {+} indicates a diversity enriched offering.

### Recommended

| ART 329  | World Art (+)                                 |
|----------|---|
|          | (Prerequisites: ENG 100/101)                  |
| CHD 440  | Drugs, Values and Society                     |
|          | (Prerequisites: ENG 100/101)                  |
| CIS 301  | Management Information Systems                |
| ECE 310  | Cultural Pluralism: Impact on Early Childhood |
|          | Development and Education                     |
| ECO 430  | Economics and Philosophy                      |
| ENG 432  | Report and Research Paper Writing             |
|          | (Prerequisites: ENG 100/101)                  |
| HIS 350  | Cultural Diversity (+)                        |
|          | (Prerequisites: ENG 100/101)                  |
| HUB 401  | Conflict Resolution                           |
|          | (Prerequisites: ENG 100/101 and PSY 100)      |
| LAW 400  | Current Legal Issues                          |
| MGT 400  | Ethics in Law, Business and Management        |
| MGT 409C | Principles of Management and Organizations    |
| PHL 336  | Philosophy of Science                         |
|          | (Prerequisites: ENG 100/101)                  |
| PHL 437  | Ethics  |
|          | (Prerequisites: ENG 100/101)                  |
| PSY 301  | Child Development                             |
|          | (Prerequisite: ÊNG 100/101)                   |
| PSY 432  | Social Psychology                             |
|          | (Prerequisites: ENG 100/101 and PSY 100)      |
| SCI 408  | Introduction to Genetics and Heredity         |

(Recommended: prior completion of SCI 100 & 100A, or equivalent)

| SOC 310 | Cultural Dynamics in the Workplace |
|---------|------------------------------------|
|         | (Prerequisites: ENG 100/101)       |
| SOC 445 | Contemporary Social Problems       |
|         | (Prerequisites: ENG 100/101)       |

## ◆ Major in Community Health

### (620-108)

Faculty Advisor: Contact the School of Health and Human Services at 1-800-NAT-UNIV

The Bachelor of Science in Community Health (BSCH) provides a broad-based foundation in the liberal arts and sciences and a fundamental knowledge of health education including the ability to assess health needs of diverse populations, and to plan, implement, and evaluate health education programs to reduce health risk behaviors and increase positive health behaviors. The students are required to think critically, write clearly, and speak articulately.

The program is designed to prepare graduates to function as a health educator in schools, community health agencies and medical and fitness facilities in need of health educators to plan and implement health education programs for diverse individuals. The BSCH will prepare graduates to work in a variety of settings with diverse patients, families, and communities.

### Program Outcomes

The Community Health major prepares the graduate to be able to perform the following at an entry level:

- Demonstrate orally and in writing, knowledge and understanding of community health theory, and disciplinary concepts.
- Use knowledge of the determinants of health behavior and health promotion in providing health prevention programs.
- Use effective verbal, nonverbal, and media communication techniques to promote health programs for the community.
- Monitor health status to identify and solve community health problems.
- Investigate health problems and health hazards in the community.
- Educate and empower people to take action on health issues.
- Mobilize community partnerships and action to identify and solve health problems.
- Develop policies and plans that support individual and community health efforts.
- Enforce laws and regulations that protect health and ensure safety.
- Link individuals to needed healthcare services and assume the planning for provision of healthcare when unavailable.
- Evaluate effectiveness, accessibility, and quality of individual and population-based health services.
- Critique and utilize research findings and research new ideas and innovative solutions to healthcare.
- Use increasingly complex technologies in an appropriate and cost-effective manner.
- Perform in ethically and culturally sensitive ways.
- Use professional standards and make a commitment to lifelong learning.

### **Background Checks**

Clinical agencies utilized by the School of Health and Human Services may require criminal background and/or drug screening prior to acceptance of the student into the clinical facilities. Students who do not pass the criminal background check and/or drug test may be unable to attend the clinical course and therefore may be unable to complete the program of study. Any fee or cost associated with background checks and/or drug testing is the responsibility of the student.

### **Degree Requirements**

To receive a Bachelor of Science in Community Health, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

### **General Education Program Requirements**

The general education program consists of a minimum of 70.5 quarter units. Of the 70.5 units, students must complete at least 4.5 units at the upper-division level and 4.5 units in diversity enriched coursework. A plus {+} indicates a diversity enriched offering.

### AREA A: ENGLISH COMMUNICATION

### Category 1 - Writing

(10.5 quarter units required)

| ENG 100 | Effective College English I (3 quarter units)  |
|---------|--|
| ENG 101 | Effective College English II (3 quarter units) |
|         | (Prerequisite: ENG 100)                        |
| ENG 240 | Advanced Composition                           |
|         | (Prerequisite: ENG 100/101)                    |
|         |  |

## Category 2 - Speech and Communications

(4.5 quarter units required)

Com 200 Effective Communication

### AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(4.5 quarter units required)

NSG 322 Introduction to Biomedical Statistics

### AREA C: INFORMATION LITERACY

(4.5 quarter units required)

ILR 260 Information Literacy and Report Writing (Prerequisite: ENG 100/101)

### AREA D: ARTS AND HUMANITIES

(Minimum 13.5 quarter units required)

See General Education section of the catalog for applicable courses

### AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(13.5 quarter units required)

| PSY 100<br>SOC 100 | Introduction to Psychology<br>Principles of Sociology (+) |
|--------------------|---|
|                    | (Prerequisite ENG 100/101)                                |
| HIS 350            | Cultural Diversity (+)                                    |
|                    | (Prerequisite: ENG 100/101)                               |

### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(18 quarter units required)

| SCI 201  | Human Anatomy and Physiology I  |
|----------|---|
|          | (Recommended: prior completion of SCI 100 & 100A, SCI 101 & 101A, or equivalent courses.) |
| SCI 201A | Human Anatomy and Physiology Laboratory I   |
|          | (Prerequisite: SCI 201)   |
| SCI 202  | Human Anatomy and Physiology II   |
|          | (Recommended: prior completion of SCI 201 & 201A,   |
|          | SCI 100 & 100A, SCI 101 & 101A, or equivalent courses.)                                   |
| SCI 202A | Human Anatomy and Physiology Laboratory II  |
|          | (Prerequisite: SCI 202)   |
| SCI 203  | Microbiology  |
|          | (Recommended: prior completion of SCI 201 & 201A,   |
|          | SCI 202 & 202A, SCI 100 & 100A, SCI 101 & 101A, or  |
|          | equivalent courses.)  |
| SCI 203A | Microbiology Laboratory   |
|          | (Prerequisite: SCI 203)   |
|          |   |

### AREA G: MODERN LANGUAGE

(Minimum 9 quarter units)

See General Education section of the catalog for applicable courses

### AREA A-G: GENERAL EDUCATION

(6 quarter units required)

| SCI 101  | Introduction to Chemistry  |
|----------|--|
|          | (Prerequisite: MTH 204)  |
| SCI 101A | Introduction to Chemistry Laboratory (1.5 quarter units) ( <i>Prerequisites: MTH 204 and SCI 101</i> ) |

Courses taken to achieve minimum levels of collegiate-level competency in the areas of writing and mathematical concepts and systems do not satisfy any portion of the general education requirement.

### Preparation for the Major

(3 courses; 13.5 quarter units)

| SCI 408 | Introduction to Genetics and Heredity                |
|---------|--|
|         | (Recommended: prior completion of SCI 100 & 100A, or |
|         | equivalent)  |
| HED 100 | Personal Health                                      |
| HED 110 | First Aid and CPR                                    |

### **Requirements for the Major**

(15 courses; 67.5 quarter units)

| COH 300 | Introduction to Community Health                           |
|---------|--|
|         | (Prerequisites: Preparation for the major courses)         |
| COH 310 | Culture and Health   |
| COH 315 | Introduction to Epidemiology                               |
| COH 320 | Controlling Communicable Disease                           |
|         | (Prerequisites: COH 315)                                   |
| COH 370 | Alternative Health Care                                    |
| COH 380 | Introduction to Program Planning and Evaluation            |
| HED 400 | Drug Use and Abuse   |
| HED 408 | Human Sexuality  |
| COH 400 | Environmental Health                                       |
| HSC 420 | Informatics for Health Professional                        |
| COH 420 | Health Needs of Vulnerable Populations                     |
| COH 425 | Health & Safety  |
| HSC 420 | Allied Health Research                                     |
|         | (Prerequisite: NSG 322)                                    |
| HED 420 | Human Disease  |
| COH 494 | Community Health Capstone Project                          |
|         | (Prerequisites: Completion of 50 quarter units of required |
|         | coursework)  |

### Major in Health Education

### (620-107)

Faculty Advisor: Contact the School of Health and Human Services at 1-800-NAT-UNIV

The Bachelor of Science in Health Education degree provides a broad-based foundation in the liberal arts and sciences and a fundamental knowledge of health education including the ability to assess health needs of diverse populations and to plan, implement, and evaluate health education programs to reduce health risk behaviors and increase positive health behaviors. The students are required to think critically, write clearly, and speak articulately.

The program is designed to prepare graduates to function as health educators in schools, community health agencies, and in medical and fitness facilities in need of health educators to plan and implement health education programs for diverse individuals. The BS degree will prepare graduates to work in a variety of settings with diverse patients, families and communities. In addition, the program prepares majors to be eligible to sit for certification as a Certified Health Education Specialist (CHES). CHES is administered by the National Commission for Health Education Credentialing, Inc. for the purpose of evaluating prospective health educators in the competencies expected of an entry-level health educator.

### Program Outcomes

The Health Education major prepares the graduate to be able to perform the following at an entry level:

- Demonstrate orally and in writing, knowledge and understanding of health education content and disciplinary concepts including those from the arts and sciences.
- Demonstrate orally and in writing an understanding of the determinants of health behavior and health promotion.
- Use effective verbal, nonverbal, and media communication techniques to enhance learning and engagement in positive health behaviors.
- Assess individual and community needs for health education.
- Plan health education strategies, interventions, and programs.
- Implement health education strategies, interventions, and programs to reduce health risk behavior and increase positive health behaviors.
- Critique and consistently use research to improve practice and conduct evaluation and research related to health education.
- Coordinate health education strategies, interventions, and programs.
- Serve as a health educations resource person for individuals, families, and communities.
- Communicate and advocate for health and health education.
- Use increasingly complex technologies in an appropriate and cost-effective manner.
- Perform in ethically and culturally sensitive ways in providing counseling and health education.
- Use professional standards in health education practice and make a commitment to lifelong learning.

### **Background Checks**

Clinical agencies utilized by the School of Health and Human Services may require criminal background and/or drug screening prior to acceptance of the student into the clinical facilities. Students who do not pass the criminal background check and/or drug test may be unable to attend the clinical course and therefore may be unable to complete the program of study. Any fee or cost associated with background checks and/or drug testing is the responsibility of the student.

### **Degree Requirements**

To receive a Bachelor of Science in Health Education degree, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. Refer to the section on undergraduate admission requirements for specific information regarding admission and evaluation.

### **General Education Program Requirements**

The general education program consists of a minimum of 70.5 quarter units. Of the 70.5 units, students must complete at least 4.5 units at the upper-division level and 4.5 units in diversity enriched coursework. A plus {+} indicates a diversity enriched offering. All undergraduate students working toward any associate or bachelor's degree must meet the University diversity requirement.

National University has general education requirements in the following eight areas:

### AREA A: ENGLISH COMMUNICATION

### Category 1 - Writing

(10.5 quarter units required)

| ENG 100 | Effective College English I (3 quarter units)  |
|---------|--|
| ENG 101 | Effective College English II (3 quarter units) |
|         | (Prerequisite: ENG 100)                        |
| ENG 240 | Advanced Composition                           |
|         | (Prerequisite: ENG 100/101)                    |
|         |  |

### Category 2 - Speech and Communication (4.5 quarter units required)

Com 200 Effective Communication

### AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units) See General Education section of the catalog for applicable courses

### AREA C: INFORMATION LITERACY

(4.5 quarter units required)

ILR 260 Information Literacy and Report Writing (Prerequisite: ENG 100/101)

### **AREA D: ARTS AND HUMANITIES**

(Minimum 13.5 quarter units) See General Education section of the catalog for applicable courses

### AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(13.5 quarter units required)

| PSY 100 | Introduction to Psychology  |
|---------|-----------------------------|
| SOC 100 | Principles of Sociology (+) |
|         | (Prerequisite ENG 100/101)  |
| HIS 350 | Cultural Diversity (+)      |
|         | (Prerequisite: ENG 100/101) |

### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(24 quarter units required)

| SCI 101  | Introduction to Chemistry                                |
|----------|--|
|          | (Prerequisite: MTH 204)                                  |
| SCI 101A | Introduction to Chemistry Laboratory (1.5 quarter units) |
|          | (Prerequisites: SCI 101 and MTH 204)                     |

| SCI 201   | Human Anatomy and Physiology I<br>(Recommended: prior completion of SCI 100 & 100A,<br>SCI 101 & 101A, or equivalent courses) |
|-----------|---|
| SCI 201A  | Human Anatomy and Physiology Laboratory I (1.5 quarter units)   |
|           | (Prerequisite: SCI 201)   |
| SCI 202   | Human Anatomy and Physiology II   |
|           | (Recommended: prior completion of SCI 201 & 201A,   |
|           | SCI 100 & 100A, SCI 101 & 101A, or equivalent courses.)   |
| SCI 202A  | Human Anatomy and Physiology Laboratory II (1.5   |
|           | quarter units)  |
|           | (Prerequisite: SCI 202)   |
| SCI 203   | Introduction to Microbiology  |
|           | (Recommended: prior completion of SCI 201 & 201A,   |
|           | SCI 202 & 202A, SCI 100 & 100A, SCI 101 & 101A, or<br>equivalent courses)   |
| SCI 202 A | 1   |
| SCI 203A  | Introduction to Microbiology Laboratory (1.5 quarter units)   |
|           | (Prerequisite: SCI 203)   |
|           | ,   |

### AREA G: MODERN LANGUAGE

(Minimum 9 quarter units)

See General Education section of the catalog for applicable courses

### AREA A-G

(6 quarter units required)

- SCI 100 Survey of Bioscience
- SCI 100A Survey of Bioscience Laboratory (1.5 quarter units) (Prerequisite: SCI 100)

Courses taken to achieve minimum levels of collegiate-level competency in the areas of writing and mathematical concepts and systems do not satisfy any portion of the general education requirement.

### Preparation for the Major

(4 courses; 18.0 quarter units)

| SCI 408 | Introduction to Genetics and Heredity<br>(Recommended: prior completion of SCI 100 & 100A, or |
|---------|---|
|         | equivalent)   |
| HED 100 | Personal Health   |
| HED 110 | First Aid and CPR   |
| HED 212 | Nutrition and Fitness   |

### **Requirements for the Major**

(9 courses; 40.5 quarter units)

| HED 300 | Foundations of Health Education                            |
|---------|--|
|         | (Prerequisites: Preparation for the major courses)         |
| HED 310 | Health Literacy  |
| HED 321 | Behavior Change  |
| HED 400 | Drug Use and Abuse   |
| HED 408 | Human Sexuality  |
| HED 412 | Violence Prevention  |
| HED 415 | Stress and Coping  |
| HED 420 | Human Disease  |
| HED 494 | Health Education Capstone Project                          |
|         | (Prerequisites: Completion of 40 quarter units of required |
|         | coursework)  |
|         |  |

### **Upper-Division Elective Requirement**

(4 courses; 18 quarter units)

Students must complete a minimum of 18 quarter units (4 courses) of electives to fulfill the upper-division unit requirements for the Bachelor of Science in Health Education. The following are recommended:

- HED 308 Mental and Emotional Health
- HED 340 Health Counseling
- HED 350 Introduction to Coordinated School Health (strongly recommended if you plan to teach or take the CSET in Health Sciences)
- HED 424 Need Assessment Strategies for Health Education
- HSC 330 Health Education and Health Promotion
- SOC 331 Social Issues in Health and Illness
- (Prerequisites: SOC 100 and ILR 260) SOC 344 Marriage, Sex, and the Family (Prerequisites: ENG 100/101)

## Major in Health Education with a Preliminary Single Subject Credential (California)

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The Bachelor of Science in Health Education with a Preliminary Single Subject Credential (California) provides a broad-based foundation in the liberal arts and sciences and a fundamental knowledge of health education including the ability to assess health needs of diverse populations, and to plan, implement, and evaluate health education programs to reduce health risk behaviors and increase positive health behaviors. The students are required to think critically, write clearly, and speak articulately.

The program is designed to prepare graduates to function as a health educator in schools, community health agencies and medical and fitness facilities in need of health educators to plan and implement health education programs for diverse individuals. The BS degree will prepare graduates to work in a variety of settings with diverse patients, families, and communities. In addition, the program prepares majors to be eligible to sit for certification as a Certified Health Education Specialist (CHES). CHES is administered by the National Commission for Health Education Credentialing, Inc. for the purpose of evaluating prospective health educators in the competencies expected of an entry-level health educator.

### Program Outcomes

The Health Education major prepares the graduate to be able to perform the following at an entry level:

- Demonstrate orally and in writing, knowledge and understanding of health education content and disciplinary concepts including those from the arts and sciences.
- Demonstrate orally and in writing an understanding of the determinants of health behavior and health promotion.
- Use effective verbal, nonverbal, and media communication techniques to enhance learning and engagement in positive health behaviors.
- Assess individual and community needs for health education.
- Plan health education strategies, interventions, and programs.
- Implement health education strategies, interventions, and programs to reduce health risk behavior and increase positive health behaviors.
- Critique and consistently use research to improve practice and conduct evaluation and research related to health education.
- Coordinate health education strategies, interventions, and programs.
- Serve as a health education resource person for individuals,

families and communities.

- Communicate and advocate for health and health education.
- Use increasingly complex technologies in an appropriate and cost-effective manner.
- Perform in ethically and culturally sensitive ways in providing counseling and health education.
- Use professional standards in health education practice and make a commitment to lifelong learning.

### **Background Checks**

Clinical agencies utilized by the School of Health and Human Services may require criminal background and/or drug screening prior to acceptance of the student into the clinical facilities. Students who do not pass the criminal background check and/or drug test may be unable to attend the clinical course and therefore may be unable to complete the program of study. Any fee or cost associated with background checks and/or drug testing is the responsibility of the student.

### **Degree Requirements**

To receive a Bachelor of Science in Health Education degree with a preliminary Single Subject Credential (California), students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

### **General Education Program Requirements**

The general education program consists of a minimum of 81.5 quarter units. Of the 81.5 units, students must complete at least 4.5 units at the upper-division level and 4.5 units in diversity enriched coursework. A plus {+} indicates a diversity enriched offering.

### AREA A: ENGLISH COMMUNICATION

### **Category 1 - Writing**

- (10.5 quarter units required)
- ENG 100 Effective College English I (3 quarter units)
   ENG 101 Effective College English II (3 quarter units) (*Prerequisite: ENG 100*)
   ENG 240 Advanced Composition (*Prerequisite: ENG 100*/101)

### **Category 2 - Speech and Communication**

(4.5 quarter units required)

COM 100 Effective Communication

## AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

See General Education section of the catalog for applicable courses

### AREA C: INFORMATION LITERACY

(4.5 quarter units required)

ILR 260 Information Literacy and Report Writing (Prerequisite: ENG 100/101)

### AREA D: ARTS AND HUMANITIES

(Minimum 13.5 quarter units)

See General Education section of the catalog for applicable courses

### AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(13.5 quarter units required)

| SOC 100 | Principles of Sociology (+) |
|---------|-----------------------------|
|         | (Prerequisite: ENG 100/101) |
| PSY 100 | Introduction to Psychology  |
| HIS 350 | Cultural Diversity (+)      |
|         | (Prerequisite: ENG 100/101) |

### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(18 quarter units required)

| SCI 201  | Human Anatomy and Physiology I                      |
|--|---|
|  | (Recommended: prior completion of SCI 100 & 100A,   |
|  | SCI 101 & 101A, or equivalent courses.)             |
| SCI 201A   | Human Anatomy and Physiology Laboratory I (1.5      |
|  | quarter units)                                      |
|  | (Prerequisite: SCI 201)                             |
| SCI 202  | Human Anatomy and Physiology II                     |
|  | (Recommended: prior completion of SCI 201 & 201A,   |
|  | 100 & 100A, SCI 101 & 101A, or equivalent courses.) |
| SCI 202A   | Human Anatomy and Physiology Laboratory II (1.5     |
|  | quarter units)                                      |
|  | (Prerequisite: SCI 202)                             |
| SCI 203  | Introduction to Microbiology                        |
|  | (Recommended: prior completion of SCI 201 & 201A,   |
|  | SCI 202 & 202A, SCI 100 & 100A, SCI 101 & 101A, or  |
|  | equivalent courses.)                                |
| SCI 203A Introduction to Microbiology Laboratory (1.5 quarter units) |   |

SCI 203A Introduction to Microbiology Laboratory (1.5 quarter units) (Prerequisite: SCI 203)

### AREA G: MODERN LANGUAGE

(Minimum 9 quarter units)

See General Education section of the catalog for applicable courses

### Preparation for the Major

(4 courses; 15 quarter units)

| ENG 350 | Fundamentals of Linguistics                           |
|---------|---|
|         | (Prerequisites: ENG 100/101)                          |
| SCI 408 | Introduction to Genetics and Heredity                 |
|         | (Recommended: prior completion of SCI 100 & 100A, or  |
|         | equivalent)   |
| HED 212 | Nutrition and Fitness                                 |
| TED 320 | Introduction to Teaching as a Profession (includes 30 |
|         | hours of field experience) (1.5 quarter units)        |

Passage of the Basic Skills requirement and completion of TED 320 are required before taking any other TED courses required for the Blended Major

### **Requirements for the Blended Major**

### **Health Education Core Requirements**

(9 courses; 40.5 quarter units)

| HED 300 | Foundations of Health Education (Prerequisites: Preparation for the major courses) |
|---------|--|
| HED 310 | Health Literacy  |
| HED 321 | Behavior Change  |
| HED 400 | Drug Use and Abuse   |
| HED 408 | Human Sexuality  |
| HED 412 | Violence Prevention  |
| HED 415 | Stress and Coping  |
| HED 420 | Human Disease  |

Select one course from the following:

| HED 340<br>HED 350 | Mental and Emotional Health<br>Health Education and Health Promotion<br>Health Counseling<br>Introduction to Coordinated School Health<br>Need Assessment Strategies for Health Education |
|--------------------|---|
|                    |   |

### **Education Theory and Methodology Requirements**

(7 courses; 31.5 quarter units)

All teacher education coursework has a field experience component. Students must maintain a 3.0 GPA within all TED coursework.

Grades of "D" or "F" are not acceptable.

| TED 300  | Fundamentals of Education                                  |
|----------|--|
|          | (Prerequisite: Admission to Teacher Education Program, ENG |
|          | 100/101, TED 320)  |
| TED 310  | Development and Learning                                   |
|          | (Prerequisite: Admission to Teacher Education Program, ENG |
|          | 100/101, TED 320)  |
| TED 330B | Reading/Language Arts Methods-Secondary                    |
|          | (Prerequisite: Admission to Teacher Education Program, ENG |
|          | 100/101, TED 300, TED 310, TED 320)                        |
| TED 340  | Reading in the Content Area                                |
|          | (Prerequisite: Admission to Teacher Education Program, ENG |
|          | 100/101, TED 300, TED 320, TED 310)                        |
| TED 420  | Diversity in Teaching and Learning                         |
|          | (Prerequisites: ENG 100/101, TED 320)                      |
| TED 430  | Instructional Strategies for Students with Special Needs   |
|          | (Prerequisites: ENG 100/101, TED 320)                      |
| TFD 440  | Classroom Leadership and Assessment seminar                |

TED 440 Classroom Leadership and Assessment seminar (*Prerequisites: ENG 100/101, TED 320*)

### **Student Teaching Requirements**

(5 courses; 21 quarter units) (Prerequisites: ALL MAJOR coursework must be completed satisfactorily)

Students must pass the CSET prior to beginning student teaching. TED 470 A, B, C, and D are field experience courses receiving a satisfactory or unsatisfactory grade and are not factored into the cumulative GPA.

| TED 465A | Student Teaching I                                    |
|----------|---|
|          | Completion of all upper-division course requirements, |
|          | including all TED coursework)                         |
| TED 465B | Student Teaching II                                   |
|          | Completion of all upper-division course requirements, |
|          | including all TED coursework)                         |
| TED 465C | Student Teaching III                                  |
|          | Completion of all upper-division course requirements, |
|          | including all TED coursework)                         |
| TED 465D | Student Teaching IV                                   |
|          | Completion of all upper-division course requirements, |
|          | including all TED coursework)                         |
| TED 470  | Student Teaching Seminar and e-Portfolio (3 quarter   |
|          | units)  |
|          | (Must be taken concurrently with TED 465 A – D)       |

### **Credentialing Requirement**

Additional course for satisfying SB 2042 and CCTC for California Teaching Credential:

(1 courses, 4.5 quarter units)

\* Students must have senior standing to enroll in this class. The following course is graduate level. The grade earned must be a "B" or better. This course will not transfer to any graduate level program (at National University or elsewhere).

EDX 1201X Computer-based Technology in the Classroom

## Major in Physical Education

(620-106)

Faculty Advisor: Contact the School of Health and Human Services at 1-800-NAT-UNIV

The Bachelor of Science in Physical Education (BSPE) provides a broad-based foundation of physical education including: scientific foundations, psychological and cultural aspects, assessment and testing methods, trends, and development of a variety of physical activities. The students are required to think critically, write clearly, and speak articulately.

The BSPE degree will prepare graduates to work in a variety of settings with diverse individuals and communities. The program prepares students for employment in fitness programs in hospitals and the community, corporate fitness/wellness programs, private fitness facilities, and school physical education programs. In addition, the program prepares individuals to be eligible to sit for certification as a personal trainer or health/fitness instructor from the American College of Sports Medicine or as a Certified Strength and Conditioning Specialist (CSCS) or NSCA-Certified Personal trainer from the National Strength and Conditioning Association.

### Program Outcomes

The Physical Education major prepares the graduate to be able to:

- Demonstrate orally and in writing, knowledge and understanding of physical education content and disciplinary concepts related to the development of a physically educated person.
- Use effective verbal, nonverbal, and media communication techniques to enhance learning and engagement in physical activity.
- Understand movement concepts, principles, strategies, and tasks as they apply to the learning and performance of physical activities.
- Demonstrate competency in motor skills and movement patterns needed to perform a variety of physical activities.
- Communicate effectively with students, professionals, and families.
- Promote health fitness behavior appropriate in a diverse society respecting individual and cultural differences and meeting the needs and interests of the individual.
- Plan and implement a variety of developmentally appropriate instructional strategies to develop physically educated individuals based on national and state standards.
- Perform in ethically sensitive ways and provide physical education and counseling for clients, families, and communities.
- Use a variety of assessments aligned with national and state standards and state and local goals.
- Critique and consistently use research to improve practice.
- Value physical activity for health, enjoyment, challenges, selfexpression, and/or social interaction.
- Be a lifelong learner who collaborates with others to improve physical fitness for all and enhance the professional culture of the discipline.

### **Background Checks**

Clinical agencies utilized by the School of Health and Human Services may require criminal background and/or drug screening prior to acceptance of the student into the clinical facilities. Students who do not pass the criminal background check and/or drug test may be unable to attend the clinical course and therefore may be unable to complete the program of study. Any fee or cost associated with background checks and/or drug testing is the responsibility of the student.

### **Degree Requirements**

To receive a Bachelor of Science in Physical Education degree, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upperdivision level. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

### **General Education Program Requirements**

The general education program consists of a minimum of 70.5 quarter units. Of the 70.5 units, students must complete at least 4.5 units at the upper-division level and 4.5 units in diversity enriched coursework. A plus {+} indicates a diversity enriched offering.

### AREA A: ENGLISH COMMUNICATION

### Category 1 - Writing

| (10.5 quart | er units required)                             |
|-------------|--|
| ENG 100     | Effective College English I (3 quarter units)  |
| ENG 101     | Effective College English II (3 quarter units) |
|             | (Prerequisite: ENG 100)                        |
| ENG 240     | Advanced Composition                           |
|             | (Prerequisites: ENG 100/101)                   |

### Category 2 - Speech and Communication

(4.5 quarter units required)

COM 100 Introduction to Communications

### AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

See General Education section of the catalog for applicable courses

### AREA C: INFORMATION LITERACY

(4.5 quarter units required)

ILR 260 Information Literacy and Report Writing (Prerequisite: ENG 100/101)

### AREA D: ARTS AND HUMANITIES

(Minimum 13.5 quarter units)

See General Education section of the catalog for applicable courses)

### AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(13.5 quarter units required)

| SOC 100 | Principles of Sociology (+)<br>(Prerequisites: ENG 100/101) |
|---------|---|
| PSY 100 | Principles of Psychology                                    |
| HIS 350 | Cultural Diversity (+)                                      |
|         | (Prerequisites: ENG 100/101)                                |

### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(12 quarter units required)

- SCI 201 Human Anatomy and Physiology I (Recommended: prior completion of SCI 100 & 100A, SCI 101 & 101A, or equivalent courses.)
- SCI 201A Human Anatomy and Physiology Laboratory I (1.5 quarter units) (Prerequisite: SCI 201)

 SCI 202 Human Anatomy and Physiology II (Recommended: prior completion of SCI 201 & 201A, 100 & 100A, SCI 101 & 101A, or equivalent courses.)
 SCI 202A Human Anatomy and Physiology Laboratory II (1.5 quarter units)

### AREA G: MODERN LANGUAGE

(Prerequisite: SCI 202)

(Minimum 9 quarter units)

See General Education section of the catalog for applicable courses

### AREA A-G:

(9 quarter units required)

| SCI 203  | Introduction to Microbiology                                |
|----------|---|
|          | (Recommended: prior completion of SCI 201 & 201A,           |
|          | SCI 202 & 202A, SCI 100 & 100A, SCI 101 & 101A, or          |
|          | equivalent courses.)  |
| SCI 203A | Introduction to Microbiology Laboratory (1.5 quarter units) |
|          | (Prerequisite: SCI 203)                                     |

Courses taken to achieve minimum levels of collegiate-level competency in the areas of writing and mathematical concepts and systems do not satisfy any portion of the general education requirement.

### Preparation for the Major

(2 courses; 9.0 quarter units)

| HED 100 | Personal Health   |
|---------|-------------------|
| HED 110 | First Aid and CPR |

### **Requirements for the Major**

(11 courses; 49.5 quarter hours)

| PHY 300 | History & Foundations of Physical Education                  |
|---------|--|
|         | (Prerequisites: Preparation for the major courses)           |
| PHY 305 | Exercise Physiology  |
|         | (Prerequisite: SCI 201, 201A, 202, 202A)                     |
| PHY 310 | Fundamentals of Movement                                     |
|         | (Prerequisites: PHY 305 Exercise Physiology)                 |
| PHY 315 | Dance Activities   |
| PHY 320 | Sports Psychology  |
|         | (Prerequisites: PSY 100)                                     |
| PHY 325 | Sociology of Sports  |
|         | (Prerequisite: SOC 100)                                      |
| PHY 400 | Measurement and Evaluation in Physical Education             |
|         | (Prerequisites: PHY 300, PHY 305, and PHY 310)               |
| PHY 405 | Physical Education Activities                                |
| PHY 420 | Introduction to Adaptive Physical Education                  |
| PHY 440 | Standards Based Physical Education                           |
| PHY 490 | Physical Education Capstone Project                          |
|         | (Prerequisites: Completion of 40 quarter units of courses in |
|         | the major)   |

### **Upper-Division Electives**

(5 courses; 22.5 quarter units)

Students must complete a minimum of 22.5 quarter units of upperdivision electives to fulfill the upper-division unit requirements for the BSPE. The following are strongly recommended:

- PHY 410 Physical Education for Elementary Students
- PHY 415 Physical Education for Secondary Students
- SMG 430 Introduction to Sports Management
- SMG 434 Principles and Problems of Coaching
- SMG 435 Legal Aspects of Sports Administration

### Major in Physical Education with Single Subject Credential (California)

(620-106-224)

Department SOE: C. Kalani Beyer • (858) 642-8340 • cbeyer@nu.edu Chairs-SHHS: Mary Hazzard • (858) 642-8361 • mhazzard@nu.edu Lead Faculty-Credential: Mary Anne Weegar • (858) 642-8322 • mweegar@nu.edu

The Bachelor of Science in Physical Education provides a broadbased foundation of physical education including: scientific foundations, psychological and cultural aspects, assessment and testing methods, trends, and development of a variety of physical activities. The students are required to think critically, write clearly, and speak articulately.

The BS degree will prepare graduates to work in a variety of settings with diverse individuals and communities. The program prepares students for employment in fitness programs in hospitals and the community, corporate fitness/wellness programs, private fitness facilities, and school physical education programs. In addition, the program prepares individuals to be eligible to sit for certification as a personal trainer or health/fitness instructor from the American College of Sports Medicine or as a Certified Strength and Conditioning Specialist (CSCS) or NSCA-Certified Personal trainer from the National Strength and Conditioning Association.

### **Program Outcomes**

The Physical Education major prepares the graduate to be able to:

- Demonstrate orally and in writing, knowledge and understanding of physical education content and disciplinary concepts related to the development of a physically educated person.
- Use effective verbal, nonverbal, and media communication techniques to enhance learning and engagement in physical activity.
- Apply movement concepts, principles, strategies, and tasks as they apply to the learning and performance of physical activities.
- Demonstrate competency in motor skills and movement patterns needed to perform a variety of physical activities.
- Communicate effectively with students, professionals, and families.
- Promote health fitness behavior appropriate in a diverse society respecting individual and cultural differences and meeting the needs and interests of the individual.
- Plan and implement a variety of developmentally appropriate instructional strategies to develop physically educated individuals based on national and state standards.
- Perform in ethically sensitive ways and provide physical education and counseling for clients, families, and communities.
- Use a variety of assessments aligned with national and state standards and state and local goals.
- Critique and consistently use research to improve practice.
- Value physical activity for health, enjoyment, challenges, selfexpression, and/or social interaction.
- Be a lifelong learner who collaborates with others to improve physical fitness for all and enhance the professional culture of the discipline.

### Background Checks

Clinical agencies utilized by the School of Health and Human Services may require criminal background and/or drug screening prior to acceptance of the student into the clinical facilities. Students

who do not pass the criminal background check and/or drug test may be unable to attend the clinical course and therefore may be unable to complete the program of study. Any fee or cost associated with background checks and/or drug testing is the responsibility of the student.

### **Degree Requirements**

To receive a Bachelor of Science in Physical Education degree, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upperdivision level. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

### **General Education Program Requirements**

(78 quarter units)

National University has general education requirements in the following eight areas:

### AREA A: ENGLISH COMMUNICATION

### Category 1 - Writing

(10.5 quarter units required)

| Effective College English I (3 quarter units)  |
|--|
| Effective College English II (3 quarter units) |
| (Prerequisite: ENG 100/101)                    |
| Advanced Composition                           |
| (Prerequisites: ENG 100/101)                   |
|  |

### **Category 2 - Speech and Communication**

(4.5 quarter units required)

COM 100 Effective Communication

# AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(4.5 quarter units required)

See the General Education section of the catalog for applicable courses

### AREA C: INFORMATION LITERACY

(4.5 quarter units required)

| ILR 260 | Information Literacy and Report Writing |
|---------|---|
|         | (Prerequisite: ENG 100/101)             |

### AREA D: ARTS AND HUMANITIES

(Minimum 13.5 quarter units)

See the General Education section of the catalog for applicable courses

### AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(13.5 quarter units required)

| SOC 100 | Princ      | iples of | Socio | logy (+) |
|---------|------------|----------|-------|----------|
|         | ( <b>m</b> |          |       | 100/101  |

- (Prerequisites: ENG 100/101)
- PSY 100 Principles of Psychology HIS 350 Cultural Diversity (+)
- (Prerequisites: ENG 100/101)

### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(18 quarter units required)

| SCI 201  | Human Anatomy and Physiology I<br>(Recommended: prior completion of SCI 100 & 100A,<br>SCI 101 & 101A, or equivalent courses.) |
|----------|--|
| SCI 201A | Human Anatomy and Physiology Laboratory I (1.5<br>quarter units)<br>( <i>Prerequisite: SCI 201</i> )                           |
| SCI 202  |  |
| 5CI 202  | Human Anatomy and Physiology II  |
|          | (Recommended: prior completion of SCI 201 & 201A,  |
|          | 100 & 100A, SCI 101 & 101A, or equivalent courses.)  |
| SCI 202A | Human Anatomy and Physiology Laboratory II (1.5  |
|          | quarter units)   |
|          | (Prerequisite: SCI 202)  |
| SCI 203  | Introduction to Microbiology   |
|          | (Recommended: prior completion of SCI 201 & 201A,  |
|          | SCI 202 & 202A, SCI 100 & 100A, SCI 101 & 101A, or   |
|          | equivalent courses.)   |
| SCI 203A | Introduction to Microbiology Laboratory (1.5 quarter   |
| 00120011 | units)   |
|          | (Prerequisite: SCI 203)  |
|          | (1 1010quisite. DC1 200)   |

### AREA G: MODERN LANGUAGE

(Minimum 9 quarter units)

See the General Education section of the catalog for applicable courses

### Preparation for the Major

(2 courses; 6 quarter units)

| ENG 350 | Fundamentals of Linguistics<br>(Prerequisites: ENG 101)  |
|---------|--|
| TED 320 | Introduction to Teaching as a Profession (includes 30 hours of field experience) (1.5 quarter units) |

Passage of the Basic Skills requirement and completion of TED 320 are required before taking any other TED courses required for the Blended Major

### **Requirements for the Blended Major**

### **Physical Education Core Requirements**

(11 courses; 49.5 quarter hours)

| PHY 300 | History & Foundations of Physical Education        |
|---------|--|
|         | (Prerequisites: Preparation for the major courses) |
| PHY 305 | Exercise Physiology                                |
|         | (Prerequisites: SOC 201, 201A, 202, 202A)          |
| PHY 310 | Fundamentals of Movement                           |
|         | (Prerequisites: PHY 305)                           |
| PHY 315 | Dance Activities                                   |
| PHY 320 | Sports Psychology                                  |
|         | (Prerequisites: PSY 100)                           |
| PHY 325 | Sports Sociology                                   |
|         | (Prerequisite: SOC 100)                            |
| PHY 400 | Measurement and Evaluation in Physical Education   |
|         | (Prerequisites: PHY 300, PHY 305, and PHY310)      |
| PHY 405 | Physical Education Activities                      |
| PHY 420 | Introduction to Adaptive Physical Education        |
| PHY 440 | Standards Based Physical Education                 |
| PHY 415 | Physical Education for Secondary Students          |
|         |  |

### **Education Theory and Methodology Requirements**

(7 courses; 31.5 quarter units) (Prerequisite for all courses: ENG 100/101and TED 320)

All teacher education coursework has a field experience component. Students must maintain a 3.0 GPA within all TED coursework. Grades of "D" or "F" are not acceptable.

| TED 300  | Fundamentals of Education<br>(Prerequisite: Admission to Teacher Education Program, ENG |
|----------|---|
|          | 100/101, TED 320)   |
| TED 310  | Development and Learning  |
|          | (Prerequisite: Admission to Teacher Education Program, ENG                              |
|          | 100/101, TED 320)   |
| TED 330B | Reading and Language Arts Methods 4-12  |
|          | (Prerequisite: Admission to Teacher Education Program, ENG                              |
|          | 100/101, TED 300, TED 310, TED 320)   |
| TED 340  | Content Area Reading Methods -4-12  |
|          | (Prerequisite: Admission to Teacher Education Program, ENG                              |
|          | 100/101, TED 300, TED 320, TED 310)   |
| TED 420  | Diversity in Teaching and Learning  |

- TED 420 Diversity in Teaching and Learning (Prerequisites: ENG 100/101, TED 320)
- TED 430 Instructional Strategies for Students with Special Needs (*Prerequisites: ENG 100/101, TED 320*)
- TED 440 Classroom Leadership and Assessment Seminar (*Prerequisites: ENG 100/101, TED 320*)

### **Student Teaching Requirements**

### (5 courses; 21 quarter units)

(Prerequisites: ALL MAJOR coursework must be completed satisfactorily)

Students must pass the CSET prior to beginning student teaching. TED 470 A, B, C, and D are field experience courses receive a satisfactory or unsatisfactory grade, which are not factored into the cumulative GPA.

| TED 465A | Student Teaching I                                      |
|----------|---|
|          | (Prerequisites: Completion of all upper-division course |
|          | requirements, including all TED coursework)             |
| TED 465B | Student Teaching II                                     |
|          | (Prerequisites: Completion of all upper-division course |
|          | requirements, including all TED coursework)             |
| TED 465C | Student Teaching III                                    |
|          | (Prerequisites: Completion of all upper-division course |
|          | requirements, including all TED coursework)             |
| TED 465D |   |
|          | Completion of all upper-division course requirements,   |
|          | including all TED coursework)                           |
| TED 470  | Student Teaching Seminar and e-Portfolio Assessment (3  |
|          | quarter units)  |

(Must be taken concurrently with TED 465 A – D)

### **Credentialing Requirement**

Additional courses for satisfying SB 2042 and CTC for California Teaching Credential: (2 courses, 9 quarter units)

\* Students must have senior standing to enroll in these two classes. The following two courses are graduate level. The grades earned must be a "B" or better. These courses will not transfer to any graduate level program (at National University or elsewhere).

EDX 1201X Computer-based Technology in the Classroom HEDX 1201X Health Education for Teachers

## **Nursing Programs**

### Information Applicable to all Nursing Programs

Individuals expressing interest in studying nursing at National University will be provided with objective counseling regarding all of the options available to them through the Department of Nursing. Enrollment in the University does not automatically include admission to a nursing program.

### Admission Requirements

Students seeking to study nursing at National University must:

- 1. Meet all requirements for admission to an undergraduate degree program at the University as outlined in the University Catalog.
- 2. Have obtained a 2.75 cumulative GPA from all regionally accredited institutions attended.
- 3. Submit a separate application for admission into a specific nursing program (see below)

\*Note: Meeting the minimum requirements, as listed above, does not guarantee admission into a nursing program.

### Admission Process

Admission into the nursing programs at National University is a two-step process: 1) Application to the University; and 2) Application to the respective nursing program.

Prospective students should follow the application requirements listed in the "General Admission Procedures" section of this catalog.

In addition, prospective nursing students will complete a separate application for admission to a specific nursing program. These applications, with supporting documents, are accepted year-round and should be sent to the Department of Nursing, National University, 11255 North Torrey Pines Road, La Jolla, CA 92037. Students taking their preparation courses at National University are held to the same standard as those who transfer preparation courses in from other schools. A minimum GPA of 2.75 is required for entry into NSG 211T.

All nursing program applications are reviewed by an admissions committee in a competitive selective review process. Admission is granted to the most qualified candidates. Denied applicants are eligible to re-apply one year from the denial date. Denied applicants are not given specific reasons for the denial of their application.

Students are not eligible for financial aid until the evaluation is complete. Students who have a previous Bachelors degree are only eligible to apply to the BSN Accelerated Post Bachelor program.

Before participating in clinical practicums, students must submit proof of a health clearance that complies with the health facility's requirements for immunizations and health screening tests. In addition, before engaging in clinical practicums at health facilities, students will be required to obtain professional liability insurance in the amount of \$1,000,000 per occurrence/ \$3,000,000 aggregate. Continued coverage throughout the program is required. Students must possess a social security number to disclose to the California Board of Registered Nursing (BRN) at the time of Application for Licensure by Examination.

The Department of Nursing requires that students who participate in fieldwork in healthcare facilities maintain current health insurance

coverage and Cardio-Pulmonary Resuscitation (CPR) certificate from (BLS-Basic Life Support for Health Care Providers). The student is responsible to determine if his/her insurance coverage includes provisions for emergency room visits in the event of a needle stick or other high risk exposure in the clinical setting, as well as the costs of anti-HIV drugs if the physician determines the medications are warranted. Prior to a clinical experience in a facility, students may be required to demonstrate freedom from drug use through screening. Facilities may also demand an individual background check and fingerprinting on a student. Students are responsible to meet all requirements established by clinical facilities.

Students will need to provide their own transportation to class and all clinical experiences. Proof of auto insurance, a current car registration, and a valid driver's license is required for access to clinical facilities located on military installations.

### MENTAL AND PHYSICAL QUALIFICATIONS FOR PROFESSIONAL NURSING

Please be advised that there are minimum entry qualifications to professional nursing practice. Typically, all nursing employers set up minimal physical and mental standards for employment as a registered nurse. National University wishes to inform prospective students of the general nature of such qualifications, although qualifications may vary among employers. Further, National University wishes to assist applicants in meeting all essential qualifications. Applicants should assess their own capabilities for nursing <u>prior</u> to entering the profession of nursing as a graduate. Thus, the following are MINIMUM mental and physical qualifications for admission of applicants to a professional nursing program:

- Frequently work in a standing position and do frequent walking.
- Lift and transfer patients up to 6 inches from a stooped position, then push or pull the weight up to 3 feet.
- Lift and transfer patients from a stooped to an upright position to accomplish bed-to-chair and chair-to-bed transfers.
- Physically apply up to 10 pounds of pressure to bleeding sites, or in performing CPR.
- Respond and react immediately to auditory instructions/requests/monitor equipment, and perform auditory auscultation without auditory impediments.
- Physically perform up to a twelve hour clinical laboratory experience.
- Perform close and distance visual activities involving objects, persons, and paperwork, as well as discriminate depth and color perception.
- Discriminate between sharp/dull and hot/cold when using hands.
- Perform mathematical calculations for medication preparation and administration.
- Communication effectively, both orally and in writing, using appropriate grammar, vocabulary and word usage.
- Make appropriate and timely decisions under stressful situations.

All students of the Department of Nursing are expected to meet these qualifications and successfully complete other course requirements. Individuals applying for admission to the Department of Nursing should consider their eligibility in light of these qualifications and assess their ability to meet these qualifications.

In carrying out the nondiscrimination policy of the Department of Nursing with regard to students and applicants with disabilities, the Department will endeavor to make reasonable modifications and otherwise reasonably accommodate students and applicants with disabilities. Students with disabilities should consider their ability to meet the above qualifications with reasonable accommodation. Any requests for accommodation will be considered through the University's Office of Scholarships and Special Services as described in the university catalog.

### PROGRAM ADVISEMENT

### **Progression Requirements**

All transfer courses accepted from another college or university must be equivalent in content and credit. Students who complete coursework in preparation for the nursing major at National University will be given priority for selection into nursing classes. Students with previous preparation in nursing are admitted to the program as space is available providing requirements are met for admission to the University and the Department of Nursing. Academic acceptance is determined on an individual basis through evaluation of past academic preparation and professional experience.

Students who have not had continual enrollment in National University's nursing program (defined as not taking nursing coursework for more than a one calendar year) or who are transferring from another nursing program must demonstrate levelappropriate proficiency skills prior to readmission to the program. Likewise, these students will need to retake the medication calculation examinations successfully. Students who are unsuccessful in their first attempt at any of the nursing courses or who choose to take a voluntary break from the course sequencing for any reason will be placed in subsequent cohorts as openings in the classes are available. Students who are absent for a period of 12 months or more must re-enroll and be re-evaluated under a new catalog. Any changes in the schedule of NSG classes must have a schedule or program change form approved by the Nursing department. Students should see their admissions advisor for assistance.

Any student who wishes to challenge a nursing course (with an NSG prefix) or earn academic credit by examination must successfully complete the culminating examination appropriate to the course. University policies, found in this catalog, should be followed to apply for Challenge or Credit by Examination opportunities. In the nursing theory or non-clinical courses, the terminal measures are often a final exam and/or term paper. In the case of the challenge exam, these requirements must receive a passing grade of 80 percent or higher. In the nursing clinical laboratory classes students will demonstrate competent clinical care by way of return demonstration for all skills listed in the course syllabus being challenged. In the clinical courses where critical or life-threatening maneuvers are required, the student must perform the return demonstration with 100 percent skill and accuracy. Regardless of how many courses students take as challenge/credit by exam, they must still meet National University residency requirements.

Students requesting to take one or more NSG courses in a nondegree status will be required to first present any BRN-issued documents related to course requirements to the Department of Nursing. Students will complete a two-part interview process. After its completion, successful candidates will be enrolled in classes as spaces become available.

### The Student Agreement

To ensure that graduates of National University's nursing programs are able to meet the legal requirements of the California Board of Registered Nursing (the Board), all newly admitted nursing students must enter into a student agreement. A copy of the student agreement is distributed at the mandatory student orientation.

The student agreement gives National University the right to

suspend or terminate the student's participation in the nursing program upon showing that the student has:

- Committed acts or engaged in conduct that could constitute grounds for denial of an RN license;
- Failed to demonstrate the requisite skills and qualifications to satisfy the requirements for an RN license;
- Demonstrated other qualities or behaviors enumerated in the student agreement inconsistent with National University's recommendation of the student for an RN license. The student agreement also authorizes National University to release to the Board all pertinent information pertaining to the student's qualification or fitness for an RN license.

### **Time Management**

The professional nursing program, with its intense clinical practice component, is very demanding in terms of time and energy allocation. Students are advised not to undertake a work schedule that could jeopardize successful completion of the program.

### Student Assistance, Notice of Need to Improve, and Dismissal from School of Nursing Programs

National University is committed to maintaining quality standards throughout its nursing programs and to graduating competent professional nurses. As required by the Board, National University identifies and assists students who need special assistance, and retains in its programs only those students who are suited for entry to or advancement in the nursing profession. The Board is charged by the state with evaluating the moral character and fitness of all persons who wish to nurse in California health facilities. Every person who is an applicant for, or who now holds any nursing license is answerable to the Board for his or her fitness-related conduct.

### Learning Contracts

Learning contracts will be used by faculty to notify students of learning issues and/or a clinical performance problem. If the student fails to meet the standard set forth in the learning contract, the following may result: 1) Immediate removal from a clinical laboratory or facility site, 2) Immediate removal from a theory course, and/or 3) Recommendation of dismissal from the program of study if the situation warrants. Students will receive a copy of the contract and an additional copy will be maintained in the student's file in the Department of Nursing.

## Procedures Governing Problems with Progress in the Program

When a student is having a problem with the nursing program or a student is notified that he/she is not meeting the standards in either the classroom, nursing skills laboratory, or clinical facility, the student should meet first with the course coordinator or (if the deficit is in clinical practice) with the course coordinator and the clinical nursing faculty. The student should seek clarification of the deficit and work with the faculty to construct a plan for improvement (which may or may not include the creation of a Student/Faculty Learning Contract.)

If the candidate is allowed to continue in the program and receives a second unsatisfactory grade in a nursing theory or clinical course, the student will be recommended for dismissal from the program. The process for a hearing and appeal, upon recommendation for dismissal from a program, is outlined in the Academic Dismissal Procedure under the Academic Information for Undergraduate Degrees section of this catalog.

### **Application for Licensure**

Students seeking an RN license must apply to the Board for such a license. It is the student's responsibility to keep current on the laws pertaining to the practice of registered nursing, as these laws are subject to change. Students should submit the Application for Licensure by Examination at least four to six months before their graduation date. All requests for transcript forms must be signed after the completion/graduation date. All first time applicants are required to submit fingerprints with the application.

The Board requires applicants to take an examination containing objective multiple-choice questions administered by computer. The number of questions may vary from a minimum of 75 to a maximum of 265. The standard testing time for such examinations is a maximum of five hours.

# ■ ASSOCIATE OF SCIENCE IN NURSING (ASN)

(This program is for individuals seeking minimum preparation to take the California licensure exam for registered nursing.) (602-119)

Faculty Advisor: Contact the School of Health and Human Services at 1-800-NAT-UNIV

### **Program Outcomes**

The ASN program prepares the graduate to be able to:

- Formulate accurate nursing diagnosis based on multiple sources of collected data.
- Plan, implement, and evaluate strategies with patient-related identified nursing diagnoses.
- Work with families across the lifespan to identify learning needs and implement teaching strategies to achieve mutually defined healthcare goals.
- Manage multiple patients in a variety of settings by prioritizing and appropriately using/incorporating available resources.
- Effectively communicate with both patients/families and other members of the healthcare team.
- Assume professional, ethical, and legal behavior upholding the standards of entry into the profession.

### **Departmental Admission Requirements**

To be eligible for admission to the ASN program, candidates must satisfy all of the following criteria:

- Have completed the National University undergraduate admission process
- Submit the appropriate nursing program application
- Complete the ACCUPLACER math and English tests
- Submit a written statement of professional and educational goals to the Department of Nursing

Individuals who have already completed a bachelor's degree in any field are not eligible for this program.

### **Degree Requirements**

To receive an Associate of Science in Nursing (ASN), students must complete at least 106.5 quarter units as outlined below, 31.5 quarter units of which must be completed in residence at National University. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. The following courses are specific degree requirements.

In the absence of transfer credit, students may take additional general electives to satisfy the total units required for the degree.

### **General Education Requirements**

(12 courses; 42 quarter units)

### AREA A: ENGLISH COMMUNICATION

### CATEGORY 1 – Writing

(6 quarter units)

| ENG 100 | Effective College English I (3 quarter units)  |
|---------|--|
| ENG 101 | Effective College English II (3 quarter units) |
|         | (Prerequisite: ENG 100)                        |

### **CATEGORY 2 – Speech and Communication**

(4.5 quarter units)

COM 200 Effective Communication

## **AREA C: INFORMATION LITERACY AND TECHNOLOGY** (4.5 quarter units)

ILR 260 Information Literacy and Report Writing (Prerequisites: ENG 100/101)

### AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(9 quarter units)

| PSY 100 | Introduction to Psychology   |
|---------|------------------------------|
| SOC 100 | Principles of Sociology (+)  |
|         | (Prerequisites: ENG 100/101) |

### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(18 quarter units)

| SCI 201  | Human Anatomy and Physiology I                          |
|----------|---|
|          | (Recommended: prior completion of SCI 100 & 100A,       |
|          | SCI 101 & 101A, or equivalent courses)                  |
| SCI 201A | Human Anatomy and Physiology Laboratory I (1.5          |
|          | quarter units)  |
|          | (Prerequisite: SCI 201)                                 |
| SCI 202  | Human Anatomy and Physiology II                         |
|          | (Recommended: prior completion of SCI 201 & 201A,       |
|          | SCI 100 & 100A, SCI 101 & 101A, or equivalent courses.) |
| SCI 202A | Human Anatomy and Physiology Laboratory II (1.5         |
|          | quarter units)  |
|          | (Prerequisite: SCI 202)                                 |
| SCI 203  | Introduction to Microbiology                            |
|          | (Recommended: prior completion of SCI 201 & 201A,       |
|          | SCI 202 & 202A, SCI 100 & 100A, SCI 101 & 101A, or      |
|          | equivalent courses.)                                    |
| SCI 203A | Introduction to Microbiology Laboratory (1.5 quarter    |
|          | units)  |
|          | (Prerequisite: SCI 203)                                 |
|          |   |

### Nursing Core Courses

(16 courses; 64.5 quarter units)

| NSG 211T | Health Assessment** (3 quarter units)                      |
|----------|--|
|          | (Prerequisite: admission to nursing program and completion |
|          | of required general education preparation with a minimum   |
|          | GPA 2.75)  |
| NSG 211A | Health Assessment Clinical Laboratory** (1.5 guarter       |

units) NSG 200 Foundations of Nursing Practice\*\* (*Prerequisite: "C" or better in NSG 211T and "S" in NSG 211A*) NSG 200A Foundations of Nursing Practice Clinical Laboratory\*\* (*Prerequisite: "C" or better in NSG 211T and "S" in NSG211A*)

- NSG 205 Nursing Process I: Medical-Surgical Nursing\*\* (Prerequisite: "C" or better in NSG 200 and "S" in NSG 200A)
- NSG 205A Nursing Process I: Medical-Surgical Nursing Clinical Laboratory\*\* (Prerequisite: "C" or better in NSG 200 and "S" in NSG 200A)
- NSG 314 Nursing Process II: Child-Bearing Family Nursing \*\* (Prerequisite: "C" or better in NSG 205 and "S" NSG 205A)
- NSG 314A Nursing Process II: Child-Bearing Family Nursing Clinical Laboratory\*\* (Prerequisite: "C" or better in NSG 205 and "S" NSG 205A)
- NSG 315 Nursing Process III: Pediatric Nursing\*\* (Prerequisite: "C" or better in NSG 314 and "S" in NSG 314A)
- NSG 315A Nursing Process III: Pediatric Nursing Clinical Laboratory\*\* (Prerequisite: "C" or better in NSG 314 and "S in NSG
- 314A)
   NSG 320 Nursing Process IV: Medical-Surgical Nursing II\*\* (Prerequisite: "C" or better in NSG 315 and "S" in NSG 315A)
- NSG 320A Nursing Process IV: Medical-Surgical Nursing II Clinical Laboratory\*\* (Prerequisite: "C" or better in NSG 315 and "S" in NSG 315A)
- NSG 325 Nursing Process V: Psychosocial Nursing\*\* (Prerequisite: "C" or better in NSG 320 and "S" in NSG 320A)
- NSG 325A Nursing Process V: Psychosocial Nursing Clinical Laboratory\*\* (Prerequisite: "C" or better in NSG 320 and "S" in NSG
- 320A) NSG 340 Nursing Leadership and Management\*\* (Prerequisite: "C" or better in NSG 325 and "S" in NSG 325A)
- NSG 340A Nursing Leadership and Management Clinical Laboratory\*\* (1.5 quarter units) (Prerequisite: "C" or better in NSG 325 and "S" in NSG 325A)

\*\*Content required for licensure by CA Board of Registered Nursing

### ■ LICENSED VOCATIONAL NURSE TO ASSOCIATE OF SCIENCE IN NURSING (L.V.N.-TO-A.S.N.)

(This program is for Licensed Vocational Nurses seeking to advance to Registered Nurse.) (602-120)

Faculty Advisor: Contact the School of Health and Human Services at 1-800-NAT-UNIV

### **Departmental Admission Requirements**

To be eligible for admission to the LVN-ASN program at National University, candidates must satisfy all of the following criteria:

- Have completed the National University undergraduate admission process
- Hold a current, active license to practice as a licensed vocational nurse
- Have achieved a grade point average of 2.75 or the equivalent in the nursing portion of the LVN program
- Submit the appropriate nursing program application
- Complete the ACCUPLACER math and English tests
- Submit a written statement of professional and educational goals to the Department of Nursing

Individuals who have already completed a bachelor's degree in any field are not eligible for this program.

#### **Degree Requirements**

To receive an Associate of Science in Nursing (ASN), students must complete at least 106.5 quarter units as outlined below, 31.5 quarter units of which must be completed in residence at National University. The following courses are specific degree requirements. In the absence of transfer credit, students may take additional general electives to satisfy the total units required for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. Students exiting after completing the courses required for licensure by the California Board of Registered Nursing (as designated below) without completing at least 106.5 quarter units (at National University or through credit transfer) will not be granted the ASN degree.

#### **General Education Requirements**

(12 courses; 42 quarter units)

#### AREA A: ENGLISH COMMUNICATION

#### CATEGORY 1 – Writing

(6 quarter units)

| ENG 100 | Effective College English I (3 quarter units)  |
|---------|--|
| ENG 101 | Effective College English II (3 quarter units) |
|         | (Prerequisite: ENG 100)                        |

#### CATEGORY 2 – Speech and Communication

(4.5 quarter units)

COM 200 Effective Communication

## **AREA C: INFORMATION LITERACY AND TECHNOLOGY** (4.5 quarter units)

ILR 260 Information Literacy and Report Writing (Prerequisites: ENG 100/101)

#### AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(9 quarter units)

| PSY 100 | Introduction to Psychology   |
|---------|------------------------------|
| SOC 100 | Principles of Sociology (+)  |
|         | (Prerequisites: ENG 100/101) |

#### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(22.5 quarter units)

| SCI 201  | Human Anatomy and Physiology I                          |
|----------|---|
|          | (Recommended: prior completion of SCI 100 & 100A,       |
|          | SCI 101 & 101A, or equivalent courses)                  |
| SCI 201A | Human Anatomy and Physiology Laboratory I (1.5          |
|          | quarter units)  |
|          | (Prerequisite: SCI 201)                                 |
| SCI 202  | Human Anatomy and Physiology II                         |
|          | (Recommended: prior completion of SCI 201 & 201A,       |
|          | SCI 100 & 100A, SCI 101 & 101A, or equivalent courses.) |
| SCI 202A | Human Anatomy and Physiology Laboratory II              |
|          | (Prerequisite: SCI 202)                                 |
| SCI 203  | Introduction to Microbiology                            |
|          | (Recommended: prior completion of SCI 201 & 201A,       |
|          | SCI 202 & 202A, SCI 100 & 100A, SCI 101 & 101A, or      |
|          | equivalent courses.)                                    |
| SCI 203A | Introduction to Microbiology Laboratory (1.5 quarter    |
|          | units)  |
|          | (Prerequisite: SCI 203)                                 |

#### **Nursing Core Courses**

(9 courses; 33 quarter units)

| NSG 211T | Health Assessment** (3 quarter units)<br>(Prerequisite: admission to nursing program and completion<br>of required general education preparation with a minimum<br>GPA 2.75) |
|----------|--|
| NSG 211A | Health Assessment Clinical Laboratory** (1.5 quarter units)  |
| NSG 310  | Professional Nursing Values**  |
| NSG 320  | Nursing Process IV: Medical-Surgical Nursing II**<br>(Prerequisites: "C" or better in NSG 315 and "S" in NSG 315Ar)  |
| NSG 320A | Laboratory**   |
|          | (Prerequisites: "C" or better in NSG 315 and "S" in NSG 315A)  |
| NSG 325  | Nursing Process V: Psychosocial Nursing**  |
|          | (Prerequisite: "C" or better in NSG 320 and "S" in NSG 320A)   |
| NSG 325A | Nursing Process V: Psychosocial Nursing Clinical<br>Laboratory**   |
|          | (Prerequisite: "C" or better in NSG 320 and "S" in NSG 320A)   |
| NSG 340  | Nursing Leadership and Management**  |
|          | (Prerequisite: "C" or better in NSG 325 and "S" in NSG 325A)   |
| NSG 340A | Nursing Leadership and Management Clinical   |
|          | Laboratory** (1.5 quarter units)   |
|          | (Prerequisite: "C" or better in NSG 325 and "S" in NSG   |

Laboratory\*\* (1.5 quarter units) (Prerequisite: "C" or better in NSG 325 and "S" in NSG 325A)

\*\*Content required for licensure by CA Board of Registered Nursing

# ■ BACHELOR OF SCIENCE IN NURSING (BSN)

#### (651)

Faculty Advisor: Contact the School of Health and Human Services at 1-800-NAT-UNIV

The Bachelor of Science in Nursing (BSN) program prepares degree candidates to develop critical thinking, communication and therapeutic nursing skills within the framework of transcultural nursing. Graduates are able to manage the nursing care of culturally diverse clients in a variety of settings.

The BSN program is accredited by the Commission on Collegiate Nursing Education (CCNE) through June 2011. The community health nursing course sequencing and content (NSG 412, NSG 411, and NSG 410) meet requirements for certification as a public health nurse in California.

#### Program Outcomes

The BSN program prepares the graduate to be able to:

- Formulate accurate nursing diagnoses based on multiple sources of collected data.
- Plan, implement, and evaluate strategies with patient-related identified nursing diagnoses.
- Work with families across the lifespan to identify learning needs and implement teaching strategies to achieve mutually defined healthcare goals.
- Manage multiple patients in a variety of settings by prioritizing and appropriately using/incorporating available resources.
- Effectively communicate with both patients/families and other members of the healthcare team.
- Assume professional, ethical, and legal behavior upholding the standards of entry into the profession.
- Practice professional nursing using theory and knowledge as a 249

basis for practice.

- · Demonstrate competency by meeting standards of care in providing nursing care to a diverse set of clients in a multicultural community.
- Demonstrate competency and leadership in organizing care for a caseload of clients.
- Analyze and synthesize current findings from nursing research and research in related fields.
- Evaluate current findings from relevant research for utilization in practice.
- Develop a critical stance on professional issues related to nursing practice, education, and knowledge development by analyzing the historical and contemporary environments in nursing.
- Use computer technologies to augment productivity and to gain access to multiple informational resource services.

### BACHELOR OF SCIENCE IN NURSING **GENERIC ENTRY (B.S.N.)**

(This program is for students with little or no prior college credits.) (651)

Faculty Advisor: Contact the School of Health and Human Services at 1-800-NAT-UNIV

#### **Departmental Admission Requirements**

To be eligible for admission to the generic entry BSN program, candidates must satisfy all of the following criteria:

- · Have completed the National University undergraduate admission process
- Submit the appropriate nursing program application
- Complete the ACCUPLACER math and English tests
- Submit a written statement of professional and educational goals to the Department of Nursing

#### **Degree Requirements**

To receive a Bachelor of Science in Nursing (BSN), students must complete at least 180 quarter units as outlined below, 45 quarter units of which must be completed in residence at National University and 76.5 quarter units must be upper-division. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. The following courses are specific degree requirements. In the absence of transfer credit, students may be required to take additional electives to satisfy the total units required for the degree.

#### **Required General Education Preparation**

(18 courses; 69 quarter units)

#### AREA A: ENGLISH COMMUNICATION

#### CATEGORY - 1 Writing

(6 quarter units)

| ENG 100 | Effective College English I (3 quarter units)  |
|---------|--|
| ENG 101 | Effective College English II (3 quarter units) |
|         | (Prerequisite: ENG 100)                        |

#### **CATEGORY 2 – Speech and Communication**

(4.5 quarter units)

COM 200 Effective Communication

#### AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(4.5 quarter units)

| MTH 210 | Introduction to Probability and Statistics |  |
|---------|--|--|
|         | (Prerequisite: Placement Evaluation)       |  |
| or      |  |  |

NSG 322 Introduction to Biomedical Statistics

#### AREA C: INFORMATION LITERACY AND TECHNOLOGY (4.5 quarter units)

ILR 260 Information Literacy and Report Writing (Prerequisites: ENG 100/101)

#### AREA D: ARTS AND HUMANITIES

(9 quarter units)

See the General Education section of the catalog for applicable courses

#### AREA E: SOCIAL AND BEHAVIORAL SCIENCES (9 quarter units)

PSY 100 Introduction to Psychology SOC 100 Principles of Sociology (+) (Prerequisites: ENG 100/101)

## AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(18 quarter units)

| SCI 201  | Human Anatomy and Physiology I<br>(Recommended: prior completion of SCI 100 & 100A,<br>SCI 101 & 101A, or equivalent courses)                                   |
|----------|---|
| SCI 201A | Human Anatomy and Physiology Laboratory I (1.5<br>quarter units)<br>(Prerequisite: SCI 201)   |
| SCI 202  | Human Anatomy and Physiology II<br>(Recommended: prior completion of SCI 201 & 201A,<br>SCI 100 & 100A, SCI 101 & 101A, or equivalent courses.)                 |
| SCI 202A | Human Anatomy and Physiology Laboratory II (Prerequisite: SCI 202)  |
| SCI 203  | Introduction to Microbiology<br>(Recommended: prior completion of SCI 201 & 201A,<br>SCI 202 & 202A, SCI 100 & 100A, SCI 101 & 101A, or<br>equivalent courses.) |
| SCI 203A | Introduction to Microbiology Laboratory (1.5 quarter<br>units)<br>( <i>Prerequisite: SCI 203</i> )  |

#### **AREA G: MODERN LANGUAGE**

(9 quarter units)

- Spanish in the Professional Work Place for English LAS 340A Speakers
- LAS 341 Applications of Cross-Cultural Communication in the Work Place

#### **AREA A-G: GENERAL EDUCATION**

(4.5 quarter units)

- SOC 500 Understanding Cultural Pluralism in American Society (Prerequisite: ENG 100/101) or
- **HUB 500** Cross-Cultural Dynamics of Human Behavior (Prerequisites: ENG 100/101 and PSY 100)

The following areas of General Education must be completed prior to beginning any preparation for the Major or Nursing Major core coursework: Area A1, A2, Area C, Area E, and Area F

#### Preparation for the Major

(6 courses; 22.5 quarter units)

- NSG 211T Health Assessment\*\* (3 quarter units) (Prerequisite: admission to nursing program and completion of required general education preparation with a minimum GPA 2.75)
- NSG 211A Health Assessment Clinical Laboratory\*\* (1.5 quarter units)
- NSG 200 Foundations of Nursing Practice\*\* (Prerequisite: "C" or better in NSG 211T and "S" in NSG 211A)
- NSG 200A Foundations of Nursing Practice Clinical Laboratory\*\* (Prerequisite: "C" or better in NSG 211T and "S" in NSG 211A)
- NSG 205 Nursing Process I: Medical-Surgical Nursing\*\* (Prerequisite: "C" or better in NSG 200 and "S" in NSG 200A)
- NSG 205A Nursing Process I: Medical-Surgical Nursing Clinical Laboratory\*\* (Prerequisite: "C" or better in NSG 200 and "S" in NSG 200A)

#### **Nursing Core Courses**

(17 courses; 73.5 quarter units)

- NSG 314 Nursing Process II: Child-Bearing Family Nursing\*\* (Prerequisites: "C" or better in NSG 205 and "S" in NSG 205A)
- NSG 314A Nursing Process II: Child-Bearing Family Nursing Clinical Laboratory\*\* (Prerequisites: "C" or better in NSG 205 and "S" in NSG 205A)
- NSG 315 Nursing Process III: Pediatric Nursing<sup>\*\*</sup> (Prerequisite: "C" or better in NSG 314 and "S" in NSG 314A)
- NSG 315A Nursing Process III: Pediatric Nursing Clinical Laboratory\*\* (Prerequisite: "C" or better in NSG 314 and "S" in NSG314A)
- NSG 320 Nursing Process IV: Medical-Surgical Nursing II\*\* (Prerequisite: "C" or better in NSG 315 and "S" in NSG 315A)
- NSG 320A Nursing Process IV: Medical-Surgical Nursing II Clinical Laboratory\*\* (Prerequisite: "C" or better in NSG 315 and "S" in NSG
- 315A) NSG 325 Nursing Process V: Psychosocial Nursing\*\* (Prerequisite: "C" or better in NSG 320 and "S" in NSG 320A)
- NSG 325A Nursing Process V: Psychosocial Nursing Clinical Laboratory\*\*

(Prerequisite: "C" or better in NSG 320 and "S" in NSG 320A)

- NSG 340 Nursing Leadership and Management\*\* (Prerequisite: "C" or better in NSG 325 and "S" in NSG 325A)
- NSG 340A Nursing Leadership and Management Clinical Laboratory\*\* (1.5 quarter units) (*Prerequisite: "C" or better in NSG 325 and "S" in NSG* 325A)
- NSG 403 Theoretical Models and Conceptual Frameworks as a Basis for Nursing Practice
- NSG 404 Pharmacology for Nurses NSG 410 Nursing in the Community: Population Focused Practice\*\*\*
- (Prerequisites: NSG 411)
   NSG 411 Nursing in the Community: Frameworks for Practice\*\*\* (Prerequisites: NSG 412)
- NSG 412 Nursing in the Community: Health Care Delivery\*\*\* (Prerequisite: Completion of all 300-level nursing courses)

- NSG 422 Introduction to Nursing Research (Prerequisite: NSG 322 and completion of all 300-level nursing courses)
- NSG 440 Issues in Professional Nursing (capstone course) (Prerequisites: completion of all other required nursing courses)

\*\* Content required for licensure by CA Board of Registered Nursing

\*\*\*This course requires a clinical practicum of 32 hours

### ■ LICENSED VOCATIONAL NURSE TO BACHELOR OF SCIENCE IN NURSING (L.V.N.-TO-B.S.N.)

(for Licensed Vocational Nurses seeking to advance to BSN-prepared Registered Nurse)

(651-120)

Faculty Advisor: Contact the School of Health and Human Services at 1-800-NAT-UNIV

#### **Departmental Admission Requirements**

To be eligible for admission to the LVN-BSN program, candidates must satisfy all of the following criteria:

- Have completed the National University undergraduate
   admission process
- Hold a current, active license to practice as a licensed vocational nurse
- Have achieved a grade point average of 2.75 or the equivalent in the nursing portion of the LVN program
- Submit the appropriate nursing program application
- Complete the ACCUPLACER math and English tests
- Submit a written statement of professional and educational goals to the Department of Nursing

#### **Degree Requirements**

To receive a Bachelor of Science in Nursing (BSN), students must complete at least 180 quarter units as outlined below, of which a minimum of 76.5 quarter units must be completed at the upperdivision level and 45 quarter units of which must be completed in residence at National University. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. The following courses are specific degree requirements. In the absence of transfer credit, students may take additional general electives to satisfy the total units required for the degree. Students exiting after completing the courses required for licensure by the California Board of Registered Nursing (as designated below) without completing at least 180 quarter units (at National University or through credit transfer) will not be granted the BSN degree.

#### **General Education Requirements**

(18 courses; 69 quarter units)

#### AREA A: ENGLISH COMMUNICATION

CATEGORY 1 – Writing

(6 quarter units)

ENG 100Effective College English I (3 quarter units)ENG 101Effective College English II (3 quarter units)<br/>(Prerequisite: ENG 100)

| <b>CATEGOR</b><br>(4.5 quarter | Y 2 – Speech and Communication             | NSG 340A |
|--------------------------------|--|----------|
| COM 200                        | Effective Communication                    |          |
| AREA B: N                      | MATHEMATICAL CONCEPTS AND QUANTITATIVE     | NSG 403  |
| REASONI                        | NG (4.5 quarter units)                     | NICC 404 |
| MTH 210                        | Introduction to Probability and Statistics | NSG 404  |
|                                | (Prerequisite: Placement Evaluation)       | NSG 410  |
| or                             |  | NSG 411  |
| NSG 322                        | Introduction to Biomedical Statistics      | N5G 411  |
|                                |  | NSG 412  |
| AREA C: I                      | NFORMATION LITERACY AND TECHNOLOGY         | 100 112  |
| (4.5 quarter                   | units)                                     | NSG 422  |
| ILR 260                        | Information Literacy and Report Writing    |          |
|                                | (Prerequisites: ENG 100/101)               |          |
|                                | • •  | NSG 440  |

#### AREA D: ARTS AND HUMANITIES (9 quarter units)

See listing of General Education courses offered in this category.

#### AREA E: SOCIAL AND BEHAVIORAL SCIENCES

| (9 quarter units) |                              |  |
|-------------------|------------------------------|--|
| PSY 100           | Introduction to Psychology   |  |
| SOC 100           | Principles of Sociology (+)  |  |
|                   | (Prerequisites: ENG 100/101) |  |

#### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

| (18 quarter units) |   |  |
|--------------------|---|--|
| SCI 201            | Human Anatomy and Physiology I                                |  |
|                    | (Recommended: prior completion of SCI 100 & 100A, SCI 101 &   |  |
|                    | 101A, or equivalent courses)                                  |  |
| SCI 201A           | Human Anatomy and Physiology Laboratory I (1.5 quarter units) |  |
|                    | (Prerequisite: SCI 201)                                       |  |
| SCI 202            | Human Anatomy and Physiology II                               |  |
|                    | (Recommended: prior completion of SCI 201 & 201A, SCI 100 &   |  |
|                    | 100A, SCI 101 & 101A, or equivalent courses.)                 |  |
| SCI 202A           | Human Anatomy and Physiology Laboratory II                    |  |
|                    | (Prerequisite: SCI 202)                                       |  |
| SCI 203            | Introduction to Microbiology                                  |  |
|                    | (Recommended: prior completion of SCI 201 & 201A, SCI 202 &   |  |
|                    | 202A, SCI 100 & 100A, SCI 101 & 101A, or equivalent courses.) |  |
| SCI 203A           | Introduction to Microbiology Laboratory (1.5 quarter units)   |  |
|                    | (Prerequisite: SCI 203)                                       |  |
|                    |   |  |

#### AREA G: MODERN LANGUAGE (9 quarter units)

LAS 340A Spanish in the Professional Work Place for English Speakers LAS 341 Applications of Cross-Cultural Communication in the Work Place

#### AREA A-G: GENERAL EDUCATION (4.5 quarter units)

- Understanding Cultural Pluralism in American Society SOC 500 (Prerequisite: ENG 100/101)
- HUB 500 Cross-Cultural Dynamics of Human Behavior (Prerequisites: ENG 100/101 and PSY 100)

#### Nursing Core Courses (16 courses; 64.5 quarter units)

|     | NSG 211T | Health Assessment** (3 quarter units)                                  |
|-----|----------|--|
|     |          | (Prerequisite: admission to nursing program and completion of required |
|     |          | general education preparation with a minimum GPA 2.75)                 |
|     | NSG 211A | Health Assessment Clinical Laboratory** (1.5 quarter units)            |
|     | NSG 310  | Professional Nursing Values**  |
|     | NSG 320  | Nursing Process IV: Medical-Surgical Nursing II**                      |
|     |          | (Prerequisites: "C" or better in NSG 211T and "S" in NSG 211A)         |
|     | NSG 320A | Nursing Process IV: Medical-Surgical Nursing II Clinical               |
|     |          | Laboratory**   |
|     |          | (Prerequisite: "C" or better in NSG 211T and "S" in NSG 211A)          |
|     | NSG 325  | Nursing Process V: Psychosocial Nursing**                              |
|     |          | (Prerequisite: "C" or better in NSG 320 and "S" in NSG 320A)           |
|     | NSG 325A | Nursing Process V: Psychosocial Nursing Clinical Laboratory**          |
|     |          | (Prerequisite: "C" or better in NSG 320 and "S" in NSG 320A)           |
| 050 | NSG 340  | Nursing Leadership and Management**                                    |
| 252 |          |  |

|                | (Prerequisite: "C" or better in NSG 325 and "S" in NSG 325A)                   |
|----------------|--|
| NSG 340A       | Nursing Leadership and Management Clinical Laboratory** (1.5<br>quarter units) |
|                | (Prerequisite: "C" or better in NSG 325 and "S" in NSG 325A)                   |
| NSG 403        | Theoretical Models and Conceptual Frameworks as a Basis for                    |
|                | Nursing Practice   |
| NSG 404        | Pharmacology for Nurses  |
| NSG 410        | Nursing in the Community: Population Focused Practice***                       |
|                | (Prerequisite: NSG 411)  |
| NSG 411        | Nursing in the Community: Frameworks for Practice***                           |
|                | (Prerequisites: NSG 412)   |
| NSG 412        | Nursing in the Community: Health Care Delivery***                              |
|                | (Prerequisite: Completion of all 300-level nursing courses)                    |
| NSG 422        | Introduction to Nursing Research   |
|                | (Prerequisite: NSG 322 and completion of all 300-level nursing courses)        |
| NSG 440        | Issues in Professional Nursing (capstone course)                               |
|                | (Prerequisites: completion of all other required nursing courses)              |
| ** Content req | uired for licensure by CA Board of Registered Nursing                          |
| ,              | e requires a clinical practicum of 32 hours                                    |
|                |  |

#### ■ BACHELOR OF SCIENCE IN NURSING (B.S.N.) **RN COMPLETION**

(This program is for already licensed, registered nurses seeking a BSN degree.) (651-121) Contact the School of Health and Human Services at 1-800-NAT-UNIV

#### **Departmental Admission Requirements**

To be eligible for admission to the BSN program, candidates must satisfy all of the following criteria:

- Have completed the National University undergraduate admission process
- Hold a current, active license to practice as a registered nurse in the state/country where clinical experiences will be completed
- Have achieved a grade point average of 2.75 or the equivalent in the basic nursing program
- Be a graduate of an associate degree in nursing program or meet equivalency requirements for National University
- Submit the appropriate nursing program application
- Complete the ACCUPLACER math and English tests
- Submit a statement of educational and professional goals

#### Equivalency Requirements

Licensed RNs who have not earned the Associate of Science in Nursing degree can meet equivalency requirements by completing the general education requirements, the preparation for the major and Anatomy and Physiology (12 quarter units). Students can use Anatomy and Physiology to meet the Physical and Biological Sciences general education requirements, or they can use prior coursework from other regionally accredited institutions. The basic nursing education program must have included coursework in those areas required by the California Board of Registered Nursing.

Independent Duty Corpsmen (IDCs) who have successfully challenged the NCLEX must meet the equivalency requirements described above and successfully complete the IDC-RN transition courses (NSG 300 and NSG 301).

#### **Degree Requirements**

To receive a Bachelor of Science in Nursing (BSN), students must complete at least 180 quarter units as outlined below, a minimum of 76.5 quarter units of which must be completed at the upper-division level and 45 quarter units of which must be completed in residence at National University.

A maximum of 45 quarter units (30 semester units) of lower-division credit may be allowed for clinical courses for a registered nurse who is a graduate of a three-year hospital nursing school. Up to 22.5 quarter units (15 semester units) of additional lower-division credit may be granted for academically equivalent coursework. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

The following courses are specific degree requirements. In the absence of transfer credit, students may take additional general electives to satisfy the total units required for the degree.

#### Preparation for the Major

(6 courses; 27 quarter units)

MTH 210 Introduction to Probability and Statistics (Prereauisite: Placement Evaluation)

| 01<br>NSC 222      | Introduction to Biomodical Statistics  |
|--------------------|--|
| NSG 322<br>PSY 100 | Introduction to Biomedical Statistics<br>Introduction to Psychology  |
| SOC 100            | Principles of Sociology (+)  |
| 000100             | (Prerequisite: ENG 100/101)  |
| or                 |  |
| SOC 260            | Cultural Anthropology  |
|                    | (Prerequisite: ENG 100/101)  |
| LAS 340A           | Spanish in the Professional Work Place for English   |
| LAC 241            | Speakers   |
| LAS 341            | Applications of Cross-Cultural Communication in the<br>Work Place  |
|                    | Work Flace   |
| SOC 500            | Understanding Cultural Pluralism in American Society   |
|                    | (Prerequisite: ENG 100/101)  |
| or                 |  |
| HUB 500            | Cross-Cultural Dynamics of Human Behavior  |
|                    | (Prerequisites: ENG 100/101 and PSY 100)   |
| Dromanation        | n for the Major for Indonen dent Duty Correspondence   |
|                    | n for the Major for Independent Duty Corpsmen also<br>n additional 9 units   |
| NSG 300            | Making the Transition to the Role of the Professional  |
| 1100000            | Nurse (for IDC-RN candidates only)   |
| NSG 301            | Practicing the Role of the Professional Nurse (for IDC-  |
|                    | RN candidates only)  |
|                    | ses must be taken prior to taking any of the 400-level   |
| nursing co         |  |
|                    | Core Courses   |
| (12 courses        | ;; 46.5 quarter units)   |
| NSG 211T           | Health Assessment** (3 quarter units)  |
| 100 111            | (Prerequisite: admission to nursing program and completion   |
|                    | of required general education preparation with a minimum   |
|                    | GPA 2.75)  |
| NSG 211A           | , , , , , , , , , , , , , , , , , , ,  |
| NICC 210           | units)   |
| NSG 310<br>NSG 340 | Professional Nursing Values<br>Nursing Leadership and Management**   |
| N3G 340            | (Prerequisite: "C" or better in NSG 211T and "S" in Pass   |
|                    | NSG211A)   |
| NSG 340A           | Nursing Leadership and Management Clinical   |
|                    | Laboratory** (1.5 quarter units)   |
|                    | (Prerequisite: "C" or better in NSG 211T and "S" in NSG  |
| NICC 402           |  |
| NSG 403            | Theoretical Models and Conceptual Frameworks as a Basis for Nursing Practice   |
| NSG 404            | Pharmacology for Nurses  |
| NSG 410            | Nursing in the Community: Population Focused   |
|                    | Practice***  |
|                    | (Prerequisite: NSG 411)  |
| NSG 411            | Nursing in the Community: Frameworks for Practice***   |
| NIGG 412           | (Prerequisite: NSG 412)  |
| NSG 412            | Nursing in the Community: Health Care Delivery***<br>(Prerequisite: Completion of all 300-level nursing courses)   |
| NSG 422            | (1 πετεφαιστιές Completion of an 500-level nursing courses)  |
| 100 122            | Introduction to Nursing Research   |
|                    | Introduction to Nursing Research<br>(Prerequisite: NSG 322 and completion of all 300-level   |
|                    | Introduction to Nursing Research<br>(Prerequisite: NSG 322 and completion of all 300-level<br>nursing courses)   |
| NSG 440            | (Prerequisite: NSG 322 and completion of all 300-level<br>nursing courses)<br>Issues in Professional Nursing (capstone course)   |
| NSG 440            | (Prerequisite: NSG 322 and completion of all 300-level<br>nursing courses)<br>Issues in Professional Nursing (capstone course)<br>(Prerequisites: completion of all other required nursing |
| NSG 440            | (Prerequisite: NSG 322 and completion of all 300-level<br>nursing courses)<br>Issues in Professional Nursing (capstone course)   |

\*\*Content required for licensure by CA Board of Registered Nursing \*\*\*This course requires a clinical practicum of 32 hours

#### Electives or Transfer Units

(106.5 quarter units)

In the absence of upper-division transfer units, 16.5 quarter units of upper-division coursework may be needed to meet the minimum upper-division requirement of 76.5 quarter units. For a bachelor's

degree program, no more than 135 quarter units are allowed in transfer, of which a maximum of 103.5 quarter units (69 semester units) may be lower division.

### ■ BACHELOR OF SCIENCE IN NURSING (B.S.N.) ACCELERATED POST-BACHELOR DEGREE

(This program is for individuals with prior earned bachelor's degree (i.e., B.A., B.S.) who wish to be prepared for licensure as a registered nurse while simultaneously earning a Bachelor of Science in Nursing degree.)

(651-399)

Faculty Advisor: Contact the School of Health and Human Services at 1-800-NAT-UNIV

#### **Departmental Admission Requirements**

To be eligible for admission to the Accelerated post-bachelor's BSN program, candidates must satisfy all of the following criteria:

- Have completed the National University undergraduate admission process
- Hold a bachelor's degree from an accredited school
- Have an overall college GPA of 2.75 OR 3.0 GPA on last 60 hours of coursework completed
- Submit the appropriate nursing program application
- Complete the ACCUPLACER math and English tests
- Submit a written statement of professional and educational goals to the Department of Nursing

#### Degree Requirements

To receive a Bachelor of Science in Nursing (BSN), students must complete at least 180 quarter units as outlined below, a minimum of 76.5 quarter units of which must be completed at the upper-division level and 45 quarter units of which must be completed in residence at National University. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. The following courses are specific degree requirements. In the absence of transfer credit, students may take additional general electives to satisfy the total units required for the degree.

#### Preparation for the Major

(16 courses; 58.5 quarter units)

| COM 200  | Effective Communication                                 |
|----------|---|
| MTH 210  | Introduction to Probability and Statistics              |
|          | (Prerequisite: Placement Evaluation)                    |
| or       |   |
| NSG 322  | Introduction to Biomedical Statistics                   |
| PSY 100  | Introduction to Psychology                              |
| SOC 100  | Principles of Sociology (+)                             |
|          | (Prerequisites: ENG 100/101)                            |
| SCI 201  | Human Anatomy and Physiology I                          |
|          | (Recommended: prior completion of SCI 100 & 100A,       |
|          | SCI 101 & 101A, or equivalent courses)                  |
| SCI 201A | Human Anatomy and Physiology Laboratory I (1.5          |
|          | quarter units)  |
|          | (Prerequisite: SCI 201)                                 |
| SCI 202  | Human Anatomy and Physiology II                         |
|          | (Recommended: prior completion of SCI 201 & 201A,       |
|          | SCI 100 & 100A, SCI 101 & 101A, or equivalent courses.) |
| SCI 202A | Human Anatomy and Physiology Laboratory II              |
|          | (Prerequisite: SCI 202)                                 |
| SCI 203  | Introduction to Microbiology                            |
|          | (Recommonded, prior completion of SCI 201 & 201 A       |

(Recommended: prior completion of SCI 201 & 201A, SCI 202 & 202A, SCI 100 & 100A, SCI 101 & 101A, or

equivalent courses.)

- SCI 203A Introduction to Microbiology Laboratory (1.5 quarter units) (Prerequisite: SCI 203)
- NSG 211T Health Assessment\*\* (3 quarter units) (Prerequisite: admission to nursing program and completion of required general education preparation with a minimum GPA 2.75)
- NSG 211A Health Assessment Clinical Laboratory\*\* (1.5 quarter units)

NSG 200 Foundations of Nursing Practice\*\* (Prerequisite: "C" or better in NSG 211T and "S in NSG 211A)

- NSG 200A Foundations of Nursing Practice Clinical Laboratory\*\* (Prerequisite: "C" or better in NSG 211T and "S" in NSG 211A)
- NSG 205 Nursing Process I: Medical-Surgical Nursing\*\* (Prerequisite: "C" or better in NSG 200 and "S" in NSG 200A)
- NSG 205A Nursing Process I: Medical-Surgical Nursing Clinical Laboratory\*\* (Prerequisite: "C" or better in NSG 200 and "S" in NSG 200A)

#### **Nursing Core Courses**

(17 courses; 73.5 quarter units)

- NSG 314 Nursing Process II: Child-Bearing Family Nursing\*\* (Prerequisite: "C" or better in NSG 205 and "S" in NSG 205A)
- NSG 314A Nursing Process II: Child-Bearing Family Nursing Clinical Laboratory\*\* (Prerequisite: "C" or better in NSG 205 and "S" in NSG
- 205A) NSG 315 Nursing Process III: Pediatric Nursing\*\* (Prerequisite: "C" or better in NSG 314 and "S" in NSG 314A)
- NSG 315A Nursing Process III: Pediatric Nursing Clinical Laboratory\*\* (Prerequisite: "C" or better in NSG 314 and "S" in NSG 314A)
- NSG 320 Nursing Process IV: Medical-Surgical Nursing II\*\* (Prerequisite: "C" or better in NSG 315 and "S" in NSG 315A)
- NSG 320A Nursing Process IV: Medical-Surgical Nursing II Clinical Laboratory\*\* (Prerequisite: "C" or better in NSG 315 and "S" in NSG
- 315A) NSG 325 Nursing Process V: Psychosocial Nursing\*\* (Prerequisite: "C" or better in NSG 320 and "S" in NSG 320A)
- NSG 325A Nursing Process V: Psychosocial Nursing Clinical Laboratory\*\* (Prerequisite: "C" or better in NSG 320 and "S" in NSG
- NSG 340 Nursing Leadership and Management\*\* (Decreasista: "C" or better in NSC 325 and "S" in NSC
- (Prerequisite: "C" or better in NSG 325 and "S" in NSG 325A)
- NSG 340A Nursing Leadership and Management Clinical Laboratory\*\* (1.5 quarter units) (Prerequisite: "C" or better in NSG 325 and "S" in NSG 325A)
   NSG 403 Theoretical Models and Conceptual Frameworks as a Discretical Models and Conceptual Frameworks as a
- Basis for Nursing Practice NSG 404 Pharmacology for Nurses NSG 410 Nursing in the Community: Population Focused Practice\*\*\* (Prerequisite: NSG 411) NSG 411 Nursing in the Community: Frameworks for Practice\*\*\* (Prerequisite: NSG 412)

- NSG 412 Nursing in the Community: Health Care Delivery\*\*\* (Prerequisite: Completion of all 300-level nursing courses) NSG 422 Introduction to Nursing Research
  - (Prerequisite: NSG 322 and completion of all 300-level nursing courses)
- NSG 440 Issues in Professional Nursing (capstone course) (Prerequisites: completion of all other required nursing courses)

\*\* Content required for licensure by CA Board of Registered Nursing \*\*\*This course requires a clinical practicum of 32 hours

## **Graduate Degrees**

## ■ MASTER OF ARTS IN HEALTH EDUCATION

#### (710-502)

Faculty Advisor: Contact the School of Health and Human Services at 1-800-NAT-UNIV

The Master of Arts in Health Education degree provides a comprehensive program of graduate study building on an undergraduate major in health education. The program provides a balance of theory and application of strategies for behavior change. The program prepares a professional who can plan, implement, and evaluate health promotion programs in schools and the community to reduce the health risk behavior of children, adolescents, and adults and increase individual positive behaviors. In addition, the health educator will coordinate health education programs; act as a resource person, and community link for health education needs. The students are required to think critically, write clearly, and speak articulately. The program is designed to prepare graduates to function at an advanced level as a health educator in schools, community health agencies and medical and fitness facilities in need of health educators to plan and implement health education programs for diverse individuals. The MA degree will prepare graduates to work in a variety of settings with diverse patients, families, and communities. In addition, the program prepares majors to be eligible to sit for certification as a Certified Health Education Specialist (CHES). CHES is administered by the National Commission for Health Education Credentialing, Inc. for the purpose of evaluating prospective health educators in the competencies expected of an advanced-level health educator.

#### Program Outcomes

The Master of Arts in Health Education program prepares the graduate to be able to perform the following at an advanced level:

- Demonstrate orally and in writing, knowledge and understanding of health education theory and disciplinary concepts.
- Use knowledge of the determinants of health behavior and health promotion in providing health education.
- Use effective verbal, nonverbal, and media communication techniques to enhance learning and engagement in positive health behaviors.
- Assess individual and community needs for health education.
- Plan health education strategies, interventions, and programs.
- Implement health education strategies, interventions, and programs to reduce health risk behavior and increase positive health behaviors.
- Critique and consistently use research to improve practice and conduct evaluation and research related to health education.
- Coordinate health education strategies, interventions, and programs.
- Serve as a health education resource person for individuals, families, and communities.

- Communicate and advocate for health and health education.
- Use increasingly complex technologies in an appropriate and cost-effective manner.
- Perform in ethically and culturally sensitive ways in providing counseling and health education.
- Use professional standards in health education practice and make a commitment to lifelong learning.

#### **Background Checks**

Clinical agencies utilized by the School of Health and Human Services may require criminal background and/or drug screening prior to acceptance of the student into the clinical facilities. Students who do not pass the criminal background check and/or drug test may be unable to attend the clinical course and therefore may be unable to complete the program of study. Any fee or cost associated with background checks and/or drug testing is the responsibility of the student.

#### Degree Requirements

(11 courses; 49.5 quarter units)

To receive a Master of Arts in Health Education, students must complete at least 49.5 quarter units as articulated below. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work at another accredited institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Refer to the section on graduate admission requirements for specific information regarding admission and evaluation.

#### **Core Requirements**

(10 courses; 45 quarter units)

- HED 600 Models & Theories of Health Education
- HED 610 Healthy People and Preventive Services
- HED 615 Health Education Program Planning
- HED 625 Contemporary Issues in Health Education
- HED 630 Program Evaluation in Health Education
- HED 640 Coalitions and Partnerships
- HED 650 Health Promotion Management
- HED 680 Community-Based Research
- HED 685 Internship in Health Education (Prerequisites: Must be taken as one of the last two courses in the program of study.)

HED 694 Thesis

(Prerequisite: HED 680 Community-Based Research and an undergraduate or graduate statistics course)

| or      |  |
|---------|--|
| HED 690 | Research Capstone Project                        |
|         | (Prerequisite: HED 680 Community-Based Research) |

#### Elective

(1 course; 4.5 quarter units)

Choose one graduate level elective from the following.

| HED 602 | Introductory Health Education: K-12 |
|---------|-------------------------------------|
| HED 620 | Coordinated School Health Programs  |
| COH 600 | Foundations of Community Health     |
| COH 610 | Global Health Issues                |

## MASTER OF HEALTH CARE ADMINISTRATION (MHCA)

(732)

Faculty Advisor: Bart Chapman • (858) 642-8391 • bchapman@nu.edu

The field of healthcare administration offers students an excellent

opportunity to focus their graduate business study in one of the largest industries in the United States. Major changes are occurring within the U.S. health delivery system. Population growth continues in all age groups. These demographics have increased the demand for graduates with an academic foundation in healthcare management. Opportunities are noted in government at all levels, public health, professional agencies at multiple levels, and in the direct delivery system.

This unique and rewarding professional program provides students with a carefully structured range of healthcare administration courses and enhances students' understanding of the U.S. health delivery system. This field of study focuses on the emergence of our healthcare system and its various components as outlined in the Health Care Management Program Handbook. Graduates also enhance their opportunities for professional growth and job placement in this prestigious field through carefully planned residencies. Students also participate in scholastic research focusing on specific healthcare issues as the current delivery system undergoes reform.

#### Program Outcomes

Upon completion of the Master of Health Care Administration the graduate of this program will be able:

- Design a cost effective healthcare delivery system which will emphasize organizational and financial management techniques
- Understand complex healthcare information and telemedicine technologies and their application to the healthcare delivery system
- Demonstrate both orally and in writing an understanding of the complexities of a health care delivery system and the costs involved in implementing the system
- Demonstrate a sound understanding of bioethics, laws and regulations as they apply to the healthcare system
- Have a strong fundamental knowledge of health care costs and the various procedures applied to them
- Demonstrate both orally and in writing the complex data, concepts, collections, statistical evaluation and dissemination of healthcare organizational and financial data.
- Understand the complex issues of care for the advancing age population
- Construct a strategic plan in both organization and finance for the operation of an ambulatory clinical center
- Demonstrate a sound knowledge of the ever increasing rules and regulations as they apply to the healthcare industry

#### Degree Requirements

(12 courses; 54 quarter units)

To receive an MHCA degree, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Refer to the section on graduate admission requirements for specific information regarding application and evaluation.

#### **Core Requirements**

(11 courses; 49.5 quarter units)

It is recommended that students take the following courses in sequence:

ODV 610 Advanced Studies in Organizational Behavior in a Diverse Society MKT 602 Marketing Management

| TMG 620  | Principles of Technology Management                 |
|----------|---|
| HCA 620A | Health Care Management                              |
| HCA 636  | Ambulatory Care Continuum                           |
| HCA 634  | Program Planning, Strategic Planning and Evaluation |
| HCA 629  | Health Care Finance, Budget and Managed Care        |
| HCA 609A | Health Care Law, Policy, Politics and Ethics        |
| HCA 640  | Biostatistics and Research                          |
| HCA 641  | Eldercare - Issues into Practice                    |
| HCA 691A | Internship  |
|          | Internship = 500 clock hours of onsite work         |
| or       |   |

HCA 691B Research Practicum

(Research Practicum = formal academic master level written work)

Students must have completed five courses in the health care sequence before taking the capstone. Students are strongly encouraged to take HCA 640, Biostatistics, before beginning any quantitative research project, regardless of the number of courses completed in the sequence.

The lead faculty for the MHCA program may make exceptions and allow students who have completed at least three courses in the health care sequence to take the capstone. In making this decision, the following criteria will be used:

- · The student's background in healthcare and research methods
- Topic of the research or focus of the internship
- Any compelling reasons related to timing (for example, the desired internship opportunity will not be available at a later time)

#### Program Elective

(1 course; 4.5 quarter units)

For the elective, students should select a 600 level course offered in the School of Business and Management.

Note: It is recommended that students use ACC604 as the elective for the MHCA program.

### MASTER OF SCIENCE IN CLINICAL REGULATORY AFFAIRS

(720-504)

Faculty Advisor: Contact the School of Health and Human Services at 1-800-NAT-UNIV

The Master of Science in Clinical Regulatory Affairs provides a comprehensive program of graduate study in the field of clinical trials and the federal regulations associated with this endeavor. The program will be based on didactic lectures, case studies, and comprehensive texts and articles associated with federal government regulations and clinical trial research monitoring and coordinating. This program will allow the student to have a comprehensive knowledge of the field, to develop and implement appropriate protocols and documents, understand data management, and become certified in the clinical trail research industry.

The target market for this program is multifold:

- Those students with a bachelors degree in a science field and wish to obtain an advance degree which will lead them to a career in regulatory affairs
- Those students who are already in the field of regulatory affairs but do not have the credentials to further advance their careers
- Those students who wish to move within their companies to a regulatory affairs position.

All of the above candidates will have greater opportunities in the healthcare field and will have marked improvement in their career salaries.

#### **Program Outcomes**

Upon completion of this master's degree the candidates will be able to

- Understand the federal regulations in the approval process of a new drug, medical device, or biologic
- Have a fundamental knowledge of human rights obligations, adverse events, clinical trial monitoring, and data collection
- Understand good clinical and manufacturing process
- Develop and implement standard operating procedures, clinical data collection forms, electronic records, clinical trial protocols, and federal regulatory forms
- Develop and implement a methodology for a clinical with supportive data management and data analysis
- Design and implement an investigational device exemption
- Design and implement an investigational new drug application
- File for pre market approval, new drug approval, or biologic license approval
- Develop compliance document s and quality assurance and quality control documentation
- Prepare for an FDA meeting
- Understand evidence based data and data management
- Coordinate and monitor clinical trials
- Understand and comply with FDA audits
- Be proficient in statistical analysis of clinical results

#### **Background Checks**

Clinical agencies utilized by the School of Health and Human Services may require criminal background and/or drug screening prior to acceptance of the student into the clinical facilities. Students who do not pass the criminal background check and/or drug test may be unable to attend the clinical course and therefore may be unable to complete the program of study. Any fee or cost associated with background checks and/or drug testing is the responsibility of the student.

#### **Degree Requirements**

(11 courses 49.5 quarter units)

| MRA 600  | Introduction to Regulatory Affairs              |
|----------|---|
| MRA 601  | Clinical documentation                          |
| MRA 602  | Human Subjects in Clinical Trials               |
| HCA 609A | Healthcare Law, Policy, Politics and Ethics     |
| HTM 605  | Healthcare Information Technologies             |
| HCA 605  | Evidenced Based Healthcare                      |
| MRA 603  | Medical Device and Pharmaceutical Regulations   |
| MRA 604  | Coordinating and Monitoring Clinical Research   |
| MRA 605  | Analytical Methods for Regulatory Affairs       |
| MRA 606  | FDA Regulations and Submissions                 |
| MRA 610A | Research Capstone Project in Regulatory Affairs |
| or       |   |
| MRA 610B | Regulatory Affairs Internship                   |

### ■ MASTER OF SCIENCE IN COMMUNITY HEALTH

#### (720-505)

Faculty Advisor: Contact the School of Health and Human Services at 1-800-NAT-UNIV

The Master of Science in Community Health provides a comprehensive program of graduate study building on an

undergraduate major in community health. The program provides a balance of theory, knowledge, and skills in areas of community/public health. The program offers an opportunity for the student to plan, implement, and evaluate specific programs that reduce health risks. The students are required to think critically, write clearly, and speak articulately.

The program is designed to prepare graduates to function at an advanced level as a community health worker in community health/public health agency. Graduates may be employed in positions utilizing planning, administration, evaluation, research, and teaching in community health settings. The MA degree will prepare graduates to work in a variety of settings with diverse patients, families, and communities.

#### Program Outcomes

The Master of Science in Community Health prepares the graduate to be able to perform the following at an advanced level:

- Demonstrate orally and in writing, knowledge, and understanding of community health theory, and disciplinary concepts.
- Use knowledge of the determinants of health behavior and health promotion in providing health prevention programs.
- Use effective verbal, nonverbal, and media communication techniques to promote health programs for the community.
- Monitor health status to identify and solve community health problems.
- Investigate health problems and health hazards in the community.
- Educate and empower people to take action on health issues.
- Mobilize community partnerships and action to identify and solve health problems.
- Develop policies and plans that support individual and community health efforts.
- Enforce laws and regulations that protect health and ensure safety.
- Link individuals to needed healthcare services and assume the planning for provision of healthcare when unavailable.
- Evaluate effectiveness, accessibility, and quality of individual and population-based health services.
- Critique and utilize research findings and research new ideas and innovative solutions to healthcare.
- Use increasingly complex technologies in an appropriate and cost-effective manner.
- Perform in ethically and culturally sensitive ways.
- · Use professional standards and make a commitment to lifelong learning.

#### **Background Checks**

Clinical agencies utilized by the School of Health and Human Services may require criminal background and/or drug screening prior to acceptance of the student into the clinical facilities. Students who do not pass the criminal background check and/or drug test may be unable to attend the clinical course and therefore may be unable to complete the program of study. Any fee or cost associated with background checks and/or drug testing is the responsibility of the student.

#### **Degree Requirements**

(14 courses; 63 quarter units)

To receive a Master of Science in Community Health, students must complete at least 63 quarter units as articulated below. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work at another accredited institution, as it applies to this

degree and provided the units were not used in earning another advanced degree Refer to the section on graduate admission requirements for specific information regarding admission and evaluation.

#### **Core Requirements**

(12 courses; 54 quarter units)

| COH 600 | Foundations of Community Health                                 |
|---------|---|
| COH 610 | Global Health Issues  |
| COH 615 | Program Planning  |
| COH 620 | Nutrition in Promoting Health                                   |
| COH 625 | Epidemiology & Biostatistics                                    |
| COH 630 | Environmental Health Sciences                                   |
| COH 635 | Marketing Community Health                                      |
| COH 640 | Health Communication  |
| COH 660 | Health Policy, Planning and Evaluation                          |
| HED 680 | Community-Based Research  |
| COH 685 | Internship in Community Health                                  |
|         | (Prerequisites: Must be taken as one of the last two courses in |
|         | the program)  |
| COH 694 | Thesis  |
|         | (Prerequisite: HED 680 Community-Based Research and an          |
|         | undergraduate or graduate statistics course)                    |
| or      |   |
| COH 690 | Research Capstone Project                                       |
|         | (Prerequisite: HED 680 Community-Based Research)                |
|         |   |

#### **Elective Requirements**

(2 courses; 9 quarter units)

Students should choose two courses from the following:

| HED 600 | Models & Theories of Health Education |
|---------|---------------------------------------|
| HED 660 | Clinical and Preventive Services      |
| HED 650 | Health Promotion Management           |
| COH 665 | Issues in Community Health            |

HCA 620A Health Care Management

## **Certificate Program**

#### LVN "30 UNIT" OPTION CERTIFICATE (670-000-184)

Licensed vocational nurses (LVNs) who desire to complete the minimum number of units required to take the licensure examination may apply for this option. LVNs who select the "30-Unit Option" method to satisfy the requirements for licensure as a Registered Nurse should consult the Chair of the Department of Nursing for an individual program consultation to discuss the advantages and disadvantages of this option.

#### **Departmental Admission Requirements**

To be eligible for admission to the "30 Unit" certificate, candidates must satisfy all of the following criteria:

- · Have completed the National University undergraduate admission process
- Hold a current, active license to practice as a licensed vocational nurse
- Have successfully completed the required preparation courses PRIOR to submitting the application
- Submit the appropriate nursing program application
- For advising purposes only, complete the ACCUPLACER math and English tests
- For advising purposes only, submit a written statement of

professional and educational goals to the Department of Nursing

After completing the interview process, successful candidates will be enrolled in classes as spaces become available.

#### **Requirements for the Certificate**

To receive the "30 Unit Option" certificate, students must complete the 40.5 quarter units as outlined below. The following courses are specific certificate requirements.

#### **Required Preparation**

(4 courses; 12 quarter units)

| SCI 202  | Human Anatomy and Physiology II                         |
|----------|---|
|          | (Recommended: prior completion of SCI 201 & 201A,       |
|          | SCI 100 & 100A, SCI 101 & 101A, or equivalent courses.) |
| SCI 202A | Human Anatomy and Physiology Laboratory II (15          |
|          | quarter units)  |
|          | (Prerequisite: SCI 202)                                 |
| SCI 203  | Introduction to Microbiology                            |
|          | (Recommended: prior completion of SCI 201 & 201A,       |
|          | SCI 202 & 202A, SCI 100 & 100A, SCI 101 & 101A, or      |
|          | equivalent courses.)                                    |
| SCI 203A | Introduction to Microbiology Laboratory (1.5 quarter    |
|          | units)  |
|          |   |

(Prerequisite: SCI 203)

#### **Nursing Core Courses**

(7 courses; 28.5 quarter units)

- NSG 310 Professional Nursing Values\*\*
- NSG 320 Nursing Process IV: Medical-Surgical Nursing II\*\* NSG 320A Nursing Process IV: Medical-Surgical Nursing II Clinical
- NSG 320A Nursing Process IV: Medical-Surgical Nursing II Clinical Laboratory\*\* NSG 325 Nursing Process V: Psychosocial Nursing\*\*
- NSG 325 Nursing Process V: Psychosocial Nursing\*\* (Prerequisite: "C" or better in NSG 320 and "S" in NSG 320A)
- NSG 325A Nursing Process V: Psychosocial Nursing Clinical Laboratory\*\* (Prerequisite: "C" or better in NSG 320 and "S" in NSG 320A)
- NSG 340 Nursing Leadership and Management<sup>\*\*</sup> (Prerequisite: "C" or better in NSG 325 and "S" in NSG 325A)
- NSG 340A Nursing Leadership and Management Clinical Laboratory\*\* (1.5 quarter units) (Prerequisite: "C" or better in NSG 325 and "S" in NSG 325A)

\*\* Content required for licensure by CA Board of Registered Nursing

# **School of Media**

# and Communication

Dean, **Debra Bean Schneiger** M.F.A., Visual Arts School of the Art Institute of Chicago

| Degrees Offered               | .260 |
|-------------------------------|------|
| Faculty                       | .260 |
| Undergraduate Degree Programs | .261 |
| Graduate Degree Programs      |      |



The University of Values

## Degree Programs Offered and Faculty

## **Degrees Offered**

#### **Undergraduate Degrees**

#### **Bachelor of Arts**

with Majors in:
Broadcast Media<sup>(\*)</sup>
with Concentrations in:
Broadcast Media Management
Broadcast Media Production
Digital Entertainment and Interactive Arts<sup>(\*)</sup>
with Concentrations in:
Cinematic Arts
Digital Design and Web Development
Video Game Art and Animation
Video Game Production and Design
Journalism<sup>(\*)</sup>
with Concentrations in:
Broadcast Journalism
Online/Print News Journalism

#### **Graduate Degrees**

Master of Arts in Strategic Communications

Master of Fine Arts in Digital Cinema®

Master of Fine Arts in Video Game Production and Design

**Master of Science in Educational and Instructional Technology** *® with Specializations in:* 

K-12 and Higher-Education Classrooms Corporate, Military, and Government Training

Various undergraduate minors are available in some degree programs.

FOR FURTHER INFORMATION

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fax: (858) 642-8743

e-mail: somc@nu.edu

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## Mission

The School of Media and Communication is dedicated to preparing a diverse population of learners with skills and understandings for careers that merge traditional and modern media. Students will acquire a broad education in Communication theory, literacy, and research aimed at enhancing the interaction of individuals and society with media. The School of Media and Communication offers programs in evolving technologies and disciplines as well as traditional media communication. Graduates will demonstrate leadership, social responsibility, and service to the global community.

The School of Media and Communication mission is accomplished as we collectively:

- Apply the values of honesty, civility, creativity, and teamwork
- Pursue the highest standards in learning, teaching, and research
  Enhance the natural qualities, social cohesion, and knowledge base of the University's distinctive regional western states

market while preparing for a broader online marketPromote equity and cultural diversity

- Develop national and international partnerships for mutual benefit and strategic achievement
- Pursue and responding to new challenges with resourcefulness, and by expanding our resource flexibility, to achieve greater selfreliance
- Strive for continuous improvement through systematic performance evaluation.

## **Undergraduate Degrees**

### BACHELOR OF ARTS

(610)

#### **General Education Program Requirements**

The general education program consists of a minimum of 70.5 quarter units. Of the 70.5 units, students must complete at least 4.5 units at the upper division level and 4.5 units in diversity enriched course work. A plus [+] indicates a diversity enriched offering. All undergraduate students working toward any associate or bachelor's degree must meet the University diversity requirement.

National University has general education requirements in the following eight areas:

#### AREA A: ENGLISH COMMUNICATION

(Minimum 15 quarter units)

## AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

## **AREA C: INFORMATION LITERACY** (Minimum 4.5 quarter units)

#### AREA D: ARTS AND HUMANITIES

#### (Minimum 13.5 quarter units)

**AREA E: SOCIAL AND BEHAVIORAL SCIENCES** (Minimum 13.5 quarter units)

#### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(Minimum 6 quarter units required [Note: one science lab is required])

#### AREA G: MODERN LANGUAGE

(Minimum 9 quarter units)

#### AREA A-G: GENERAL EDUCATION

(Minimum 4.5 quarter units)

Courses taken to achieve minimum levels of collegiate-level competency in the areas of writing and mathematical concepts and systems do not satisfy any portion of the general education requirement.

### ◆ Major in Broadcast Media ∽

#### (610-494)

Faculty Advisor: Joan Van Tassel • (858) 642-8386 • jvantassel@nu.edu

The Bachelor of Arts with a major in Broadcast Media prepares the students for a broad range of positions in television studios, video production companies, and convergent media enterprises, as well as in the many facilities emerging as a result of the pervasive growth of digital technologies. The program covers the theory and practice of broadcast media in all of its phases and provides students with experience in field and television studio production. After completing a series of preparatory and core courses combining theory and hands-on application in broadcast and multimedia technologies, students are required to specialize in management or production. Graduates of the program can successfully apply for positions in operations, production, marketing, and advertising and management as producers, directors, camera operators, effects specialist, and project and program managers.

#### **Program Outcomes**

Upon completion of the program students should be able to:

- Use broadcast television and related media production terminology in a media production settings
- Implement strategies to operate in cooperative and collaborative management and production groups
- Operate video production equipment in the field and studio
- Develop shooting scripts for programs, using the appropriate story terminology and formatting
- Prepare a production budget for use in a variety of program formats and broadcast media environments
- Apply relevant media marketing strategies in the development of broadcast programming
- Apply the principles of single and multi-camera production techniques in the field and studio
- Develop media products for delivery over a variety of broadcast media outlets
- Apply the principles of multi-camera switching and non-linear editing of video and multi-layer sound in producing broadcast programs for a variety of media outlets
- Apply professional lighting and sound design and directing techniques in field and studio production environments
- Recognize the legal, ethical and regulatory concepts of the broadcast media industry

#### **Degree Requirements**

To receive a Bachelor of Arts in Broadcast Media, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, and 76.5 of which must be completed at the upper-division level. The following courses are specific degree requirements, including the required concentration in either management or production. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree.

#### Preparation for the Major

(6 courses; 27 quarter units)

| BRO 210 | History of TV*                                   |
|---------|--|
|         | (Prerequisites: ENG 100/101; COM 100 or COM 200) |
| COM 220 | Media Literacy*                                  |
| PSY 100 | Introduction to Psychology*                      |
| MUL 205 | Principles of Graphic Design                     |
|         | (Prerequisites: ENG 100/101 and COM 100/COM 200) |
| MUL 245 | Principles of Web Design                         |
|         | (Prerequisites: ENG 100/101 and COM 100/COM 200) |
| MUL 265 | Digital Audio and Video                          |
|         | (Prerequisites: ENG 100/101 and COM 100/COM 200) |

\* may be used to satisfy general education requirements

## **Upper-Division Requirements for the Major: Core Courses** (9 courses; 40.5 quarter units)

| BRO 305  | Media Storytelling                                     |
|----------|--|
|          | (Prerequisites: Broadcast Media Preparation Courses or |
|          | equivalents)   |
| BRO 310  | Media Facilities Operations                            |
|          | (Prerequisites: Broadcast Media Preparation Courses or |
|          | Equivalents)   |
| MUL 300  | Convergence Media                                      |
|          | (Prerequisites: MUL 200 level courses or equivalents)  |
| MKT 402A | Marketing Fundamentals                                 |
| BRO 320  | Producing I  |
|          | (Prerequisites: BRO 305)                               |
| BRO 325  | Producing II   |
|          | (Prerequisite: BRO 320)                                |
| BRO 330  | Field Production I                                     |
|          | (Prerequisite: BRO 305)                                |
| BRO 340  | Studio Production I                                    |
|          | (Prerequisite: BRO 305)                                |
| HUB 400  | Group Structure and Dynamics                           |
|          | (Prerequisites: ENG 100/101 and PSY 100)               |
|          |  |

#### **BROADCAST MEDIA CONCENTRATIONS**

Students must select one of two concentrations to match their personal interests and fulfill demands in the industry for skilled managerial and production personnel. Each concentration course builds upon the prior course, culminating in a final group project produced in a television studio with students from the other concentration.

#### Concentration in Broadcast Media Management

(510)

(6 courses; 27 quarter units)

| BRO 410  | TV/Film and Ethics                                |
|----------|---|
|          | (Prerequisites: All Broadcast Media Core Courses) |
| LED 400  | Introduction to Leadership                        |
| BRO 415  | Media Programming                                 |
|          | (Prerequisites: All Broadcast Media Core Courses) |
| BRO 420  | Electronic Media Management                       |
|          | (Prerequisites: All Broadcast Media Core Courses) |
| MGT 409C | Principles of Management and Organization         |
| BRO 440  | Studio Production II                              |
|          | (Prerequisites: All Broadcast Media Core Courses) |

#### ▲ Concentration in Broadcast Media Production

#### (511)

(6 courses; 27 quarter units)

| MUL 365 | Applied Digital and Audio                         |
|---------|---|
|         | (Prerequisite: MUL 265 or equivalent)             |
| MUL 460 | Advanced Digital and Audio                        |
|         | (Prerequisite: MUL 365)                           |
| MUL 461 | Motion Graphics                                   |
|         | (Prerequisites: All general core courses)         |
| MUL 462 | Digital Audio Creation                            |
|         | (Prerequisites: All general core courses)         |
| BRO 430 | Field Production II                               |
|         | (Prerequisites: All Broadcast Media Core Courses) |
| BRO 440 | Studio Production II                              |
|         | (Prerequisites: All Broadcast Media Core Courses) |
|         |   |

#### **Upper-Division Electives**

(1 courses; 4.5 quarter units)

To earn the Bachelor of Arts in Broadcast Media students must complete a minimum of one course (4.5 quarter units) as an elective. Students must choose one course from the following:

| MUL 450 | Advanced Web Presentation                                  |
|---------|--|
|         | (Prerequisites: all general core courses; MUL 440)         |
| MUL 460 | Advanced Digital Audio and Video                           |
|         | (Prerequisite: MUL 365)                                    |
| MUL 470 | Interactive Multimedia                                     |
|         | (Prerequisite: all general core courses)                   |
| MUL 445 | Management of Web Projects                                 |
|         | (Prerequisites: MUL 200 level requirements or equivalents) |
| LED 410 | Leading in Diverse Groups and Teams                        |
| MKT 443 | Introduction to Advertising                                |
|         | (Prerequisite: MKT 402A)                                   |
| MGT 422 | Team Building, Interpersonal Dynamics, and                 |
|         | Empowerment  |
|         |  |

# ◆ Major in Digital Entertainment and Interactive Arts ∽ी

#### (610-115)

Faculty Advisor: John Banks • (858) 642-8452 • jbanks@nu.edu

The Bachelor of Arts in Digital Entertainment and Interactive Arts consists of courses that prepare the student for a broad range of positions requiring a background in digital entertainment and interactive design theory, production, and project management. Students learn and apply development theory and practice for creating digital media and choose concentrations that allow for focused studies in the areas of Digital Design and Web Development, Video Game Art and Animation, Video Game Design and Production, and Cinematic Arts. Graduates of the program are in high demand because they possess a combination of skills and knowledge vital to today's workplace. Positions in marketing, business, publishing, government, education and training include Web Designer/Developer, Game Designer, Animator, Project Manager, and Multimedia Specialist.

#### **Program Outcomes**

Upon completion of the program students should be able to:

- Communicate effectively with clients, project managers, and media production team members in various electronic formats using oral, visual, and written methods.
- Identify the features of distribution media such as the Internet and other network systems and their application in digital media projects.

- Describe the phases of production cycles, from the initial planning stages to the final delivery of a professional product.
- Describe the appropriate technological choices associated with the software and hardware used in a broad range of digital media projects.
- Analyze digital media production software features in selecting the appropriate products to accomplish a specified project goal.
- · Explain such legal issues as copyright and the process of obtaining the use of original and licensed material in media project.
- Explain such legal issues as copyright and the process of obtaining the use of original and licensed material in media project.
- · Explain ethic issues including contemporary issues of developing of digital media and video game projects.
- Apply the principles of graphic design, information design and usability design in the generation of digital media projects.
- Prepare active and interactive content with graphics, animation, sound and digital video using contemporary digital media authoring software.
- Design interactive media using authoring software and scripting language controls such as HTML, Action Script and Lingo.
- Design a professional electronic portfolio that demonstrates writing and design competency in a variety of media, including digital design, web, digital video, 2D and 3D graphics and animation.

#### **Degree Requirements**

To receive a Bachelor of Arts degree with a Major in Digital Entertainment and Interactive Arts, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, and 76.5 of which must be completed at the upper-division level. The following courses are specific degree requirements. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree.

Students are expected to possess or have access to a computer outside of National University so that they can work on projects both on and off campus. Given the nature of digital media technology, this computer should be a 2.8 GHz processor with 512 MB of RAM or better. Software for the Multimedia program is provided for onsite computer labs only. Students are responsible for software expenses associated with online and outside activities.

#### Preparation for the Major

(8 courses; 36 quarter units)

| COM 100  | Introduction to Communications*                  |
|----------|--|
| or       |  |
| COM 200  | Effective Communication*                         |
| COM 220  | Media Literacy*                                  |
| MUL 200  | Communication Tools                              |
|          | (Prerequisites: ENG 100/101 and COM 100/COM 200) |
| MUL 205  | Principles of Graphic Design                     |
|          | (Prerequisites: ENG 100/101 and COM 100/COM 200) |
| MUL 245  | Principles of Web Design                         |
|          | (Prerequisites: ENG 100/101 and COM 100/COM 200) |
| MUL 255  | Interactive Design                               |
|          | (Prerequisites: ENG 100/101 and COM 100/COM 200) |
| MUL 265  | Digital Audio and Video                          |
|          | (Prerequisites: ENG 100/101 and COM 100/COM 200) |
| MULL OFF | 2 D Madalina and Dandanina                       |

3-D Modeling and Rendering **MUL 275** (Prerequisites: ENG 100/101 and COM 100/COM 200)

#### \* may be used to satisfy general education requirements

#### **Requirements for the Major: General Core Courses**

(11 courses; 49.5 quarter units)

| MUL 300 | Convergence Media  |
|---------|--|
|         | (Prerequisites: MUL 200 level requirements or equivalents) |
| MUL 305 | Applied Graphic Design                                     |
|         | (Prerequisites: MUL 200 level requirements or equivalents) |
| MUL 365 | Applied Digital Audio and Video                            |
|         | (Prerequisite: MUL 265 or equivalent)                      |
| MUL 335 | Digital Design for Print                                   |
|         | (Prerequisites: ENG 100/101 and COM 100/200                |
| MUL 345 | Applied Web Design   |
|         | (Prerequisites: MUL 200 level requirements or equivalents) |
| MUL 355 | Game Scripting   |
|         | (Prerequisites: MUL 200 level requirements or equivalents) |
| MUL 332 | Electronic Design and Layout                               |
|         | (Prerequisites: ENG 100/101 and COM 100)                   |
| MUL 315 | Video Game Design  |
|         | (Prerequisites: MUL 200 level requirements or equivalents) |
| MUL 375 | Applied 3-D Modeling and Rendering                         |
|         | (Prerequisites: MUL 200 level requirements or equivalents) |
| MUL 445 | Management of Web Projects                                 |
|         | (Prerequisites: MUL 200 level requirements or equivalents) |
| or      |  |
| MUL 495 | Practicum in Multimedia Arts (Internship)                  |
|         | (Prerequisites: 9 upper-division quarter units in a media  |
|         | concentration or approval by intern coordinator and lead   |
|         | faculty)   |
|         |  |

#### **Capstone Core Course**

MUL 420 Portfolio Project

(Prerequisites: all general core courses)

Note: this is a two-month long class occurring after concentration courses

#### DIGITAL ENTERTAINMENT AND INTERACTIVE ARTS CONCENTRATIONS

Concentrations allow students to select a specific area of study to match their personal interests and fulfill demand for specialization in the marketplace. Upon entering the concentration, the student will begin learning the specialized skills through threaded projects spanning the whole of the concentration. Each course will build upon the prior course, culminating in a final advanced project presentation. In order to fulfill concentration requirements, students take the four designated courses in the concentration and choose two upper division courses from MUL, COM, or CSC courses.

### Concentration in Cinematic Arts

#### (610-115-191)

(6 courses; 27 quarter units)

| MUL 460 | Advanced Digital Audio and Video                            |
|---------|---|
|         | (Prerequisites: all general core courses)                   |
| MUL 461 | Motion Graphics   |
|         | (Prerequisites: all general core courses)                   |
| MUL 462 | Digital Audio Creation                                      |
|         | (Prerequisites: all general core courses)                   |
| MUL 463 | Digital Video Production Project                            |
|         | (Prerequisites: all general core courses; MUL 460; MUL 461; |
|         | MUL 462)  |
|         |   |

Plus two upper-division electives from MUL, COM, or CSC courses

#### Concentration in Digital Design and Web Development

(610-115-190)

(6 courses; 27 quarter units)

| MUL 440 | Multimedia Design for the Web             |
|---------|---|
|         | (Prerequisites: all general core courses) |
| MUL 430 | Advanced 2-D Graphic Imaging              |
|         | (Prerequisites: all general core courses) |
| MUL 470 | Interactive Multimedia                    |
|         | (Prerequisites: all general core courses) |
| MUL 471 | Advanced Digital Interactivity Project    |
|         | (Prerequisites: all general core courses) |

Plus two upper-division electives from MUL, COM, or CSC courses.

### ▲ Concentration in Video Game Art and Animation

(610-115-192) (6 courses; 27 quarter units)

| MUL 381 | Video Game Art  |
|---------|---|
|         | (Prerequisites: all general core courses)                   |
| MUL 385 | Video Game Animation  |
|         | (Prerequisites: all general core courses)                   |
| MUL 480 | Character Animation   |
|         | (Prerequisites: all general core courses)                   |
| MUL 481 | Advanced Animation Project                                  |
|         | (Prerequisites: all general core courses; MUL 381; MUL 385; |
|         | MUL 481)  |
|         |   |

Plus two upper-division electives from MUL, COM, or CSC courses

#### ▲ Concentration in Video Game Production and Design

#### (610-115-193)

(6 courses; 27 quarter units)

| MUL 325 | Psychology of Video Gaming                                  |
|---------|---|
|         | (Prerequisites: all general core courses and PSY 100)       |
| MUL 318 | Video Game Production                                       |
|         | (Prerequisites: all general core courses)                   |
| MUL 401 | Advanced Video Game Design                                  |
|         | (Prerequisites: all general core courses)                   |
| MUL 411 | Video Game Production Project                               |
|         | (Prerequisites: all general core courses; MUL 325; MUL 318; |
|         | MUIL 401)   |

Plus two upper-division electives from MUL, COM, or CSC courses.

### ◆ Major in Journalism <sup>^</sup>

(610-495) Faculty Advisor: Sara-Ellen Amster • (714) 429-5311 • samster@nu.edu

#### **Program Description**

The Bachelor of Arts in Journalism is a pre-professional program that provides students with a solid foundation in traditional journalistic practices and theories as well as new forms of journalism that are emerging as a consequence of digital technologies and networks that are rapidly reinventing the field. The course of study includes the theory and methods of gathering information and writing for beat reporting, investigative and features stories. The program introduces students to the professional responsibilities faced by journalists and news organizations with in-depth studies of the ethical and legal ramifications of news gathering and dissemination. Students become versed in writing for different media outlets ranging from print to broadcast and web-based formats such as multimedia pages, blogs and podcasts. Students will actively engage in reporting and writing assignments in order to produce a professional portfolio that is tailored to their goals and enables them to compete for employment in the field of 21st century journalism. Graduates of the program will be prepared to embark on varied journalism career paths, including at newspapers and magazines, broadcast outlets, convergent newsrooms and new media entities.

#### **Program Outcomes**

Upon completion of the Bachelor of Arts in Journalism, students will be able to:

- Function in a newsroom setting by reporting, writing and producing stories
- Work in groups to publish an online or print news product
- Write in a variety of story forms, including news, feature, opinion and sports
- Write for a variety of news formats, including online media outlets, print newspapers, broadcast news and documentaries
- · Identify the elements of style and structure in news stories
- Apply copyediting rules and techniques for fact-checking
- · Identify what constitutes news
- Write focused news stories on deadline for publication
- · Gather information with accuracy and fairness
- Write stories that are eloquent and hold the interest of the audience
- Apply ethical principals of journalism during reporting
- Recognize the legal boundaries of the First Amendment that balance the freedom and responsibility of the press

#### **Degree Requirements**

To receive a Bachelor of Arts degree with a Major in Journalism, students must complete at least 180 quarter units as articulated below. Forty-five (45) quarter units must be completed in residence at National University and 76.5 must be completed at the upperdivision level. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree.

The following courses are the specific core courses required for the journalism major. Students are encouraged to consider their overall career plan as writers and reporters and take upper-division elective courses in liberal arts, such as politics, economics, criminal justice or education, to prepare them for careers as professional writers and communicators.

#### Preparation for the Major

(6 courses; 27 quarter units)

| COM 100<br>COM 220 | Introduction to Communication*<br>Media Literacy* |
|--------------------|---|
|                    |   |
| ENG 240            | Advanced Composition*                             |
|                    | (Prerequisites: ENG 100/101)                      |
| MUL 200            | Communication Tools                               |
|                    | (Prerequisites: ENG 100/101 and COM 100/COM 200)  |
| MUL 245            | Principles of Web Design                          |
|                    | (Prerequisites: ENG 100/101 and COM 100/COM 200)  |
| BRO 210            | History of Television                             |
|                    |   |

\* may be used to satisfy general education requirements

#### Requirements for the Major

(11 courses; 49.5 quarter units)

JRN 300 News Reporting and Writing Across Platforms (Prerequisites: ENG 100/101, ENG 240)

| JRN 301  | Copy Editing  |
|----------|---|
|          | (Prerequisites: ENG 100/101, ENG 240)                       |
| JRN 305  | The Art of the Interview                                    |
|          | (Prerequisites: ENG 100/101, ENG 240)                       |
| JRN 310  | Convergent Journalism                                       |
|          | (Prerequisites: ENG 100/101, ENG 240, COM 100 and COM       |
|          | 220)  |
| JRN 320  | Journalism Ethics   |
| -        | (Prerequisites: ENG 100/101, ENG 240, COM 100 and COM       |
|          | 220)  |
| JRN 321  | Legal Issues in Journalism                                  |
| 2        | (Prerequisites: ENG 100/101, ENG 240, COM 100 and COM       |
|          | 220)  |
| JRN 335  | Beat Reporting  |
| -        | (Prerequisites: JRN 300, JRN 301, JRN 305)                  |
| JRN 340  | Feature Writing   |
| -        | (Prerequisites: JRN 300, JRN 301, JRN 305)                  |
| JRN 330  | Investigative Reporting                                     |
| -        | (Prerequisites: JRN 300, JRN 301, JRN 305)                  |
| JRN 350  | Youth and the News  |
| -        | (Prerequisites: JRN 300; JRN 310)                           |
| JRN 495  | Capstone Project in Journalism                              |
| <i>,</i> | (Prerequisites: core courses JRN 310, JRN 330, JRN 335, JRN |
|          | 340 and concentration courses MUL 335, or JRN 430, JRN      |
|          | 431, BRO 330 BRO 340)                                       |
|          | ,   |

#### Journalism Concentration Requirements

(4 courses; 18 quarter units)

Concentrations enable students to gain expertise in a professional specialization. The BA in Journalism program offers two concentrations: online/print news and broadcast journalism. All students must choose a concentration.

#### Concentration in Broadcast Journalism

(513)

| BRO 330 | Field Production I                                |
|---------|---|
|         | (Prerequisite: BRO 305 or JRN 310)                |
| JRN 431 | Writing the TV News Script                        |
|         | (Prerequisites: JRN 430)                          |
| JRN 430 | Reporting for TV News                             |
|         | (Prerequisites: JRN 300, 310, 320, 321, 330, 335, |
| BRO 340 | Studio Production I                               |
|         | (Prerequisite: BRO 305 or JRN 310)                |

### Concentration in Online/Print News Journalism

(512)

| MUL 335 | Digital Design for Print                       |
|---------|--|
|         | (Prerequisites: ENG 100/101 and COM 100/200)   |
| JRN 355 | Writing at the Margins                         |
|         | (Prerequisites: JRN 330; JRN 335)              |
| COM 360 | Representation and Diversity in the Media      |
|         | (Prerequisites: ENG 100/101)                   |
| COM 380 | Democracy in the Information Age               |
|         | (Prerequisites: ENG 100/101)                   |
| or      |  |
| JRN 360 | Freedom of the Press: A Journey Through Cinema |
|         |  |

#### **Upper-Division Elective Courses**

(1 course; 4.5 quarter units)

To complete the requirements for the major in journalism students must take one (1) elective course at the 300 and/or 400 level. Elective courses should be chosen based on student career plans and may be taken in any subject that provides the student with an expertise in a

particular area or field of journalism: business, health, economics, ecology, etc. All journalism majors should seek the advice of the faculty advisor before selecting electives.

## **Graduate Degrees**

### ■ MASTER OF ARTS IN STRATEGIC COMMUNICATIONS<sup>2</sup>

(710-507)

Faculty Advisor: Joan Van Tassel • (858) 642 8386 • jvantassel@nu.edu

The goal of the Masters of Arts in Strategic Communications is to prepare students to assume high-level professional positions in organizations that must meet the challenges of operating in an increasingly complex and interdependent global environment. It will arm graduates with both theoretical and practical approaches to developing strategic communications programs that enable organizations meet their goals and objectives. Each course supplies an essential stepping-stone on the way to the planning, executing, and evaluating effective strategic communications efforts.

The objective of the program is to develop effective, strategicallysophisticated communications professionals who have the full complement of analytic and practical tools for leadership. It will foster strategic thinking, logical analysis, and solution generation. Upon completion of the degree, graduates will be able lead and implement communications initiatives using both traditional mass media and newer cutting-edge channels, such as social networking sites, blog sites, pod and vodcasting, Instant Messenger, and texting and other mobile media.

This degree requires that students be able to write in English at an advanced level. If the student's writing skills need improvement, it is possible the student will be required to enroll in a remedial writing course before continuing in the program. Applicants for whom English is a second language are encouraged to take the Accuplacer, English as a Second Language Placement Test.

Graduates will acquire an array of intellectual, managerial, and communication skills:

- An understanding of communications opportunities
- The ability to carry out analyses of organizational communications needs
- The knowledge to conduct needed research and audience analysis
- The training to develop, implement, and evaluate appropriate strategies and tactics to reach the multiple publics
- Professional-level writing and presentation skills.

#### **Program Learning Outcomes**

At the completion of the Master of Arts in Strategic Communications, graduates will emerge with a deep understanding of the theories of communications and persuasion, an ability to lead and participate in the team development of organizational communication strategies, and the practical skills to plan, produce, and evaluate a strategic communications program.

By the end of this program, students will be able to:

- Lead and participate in the planning, production, and execution of strategic communications programs
- Apply team management theory and skills to facilitate collaboration
- Gather appropriate data to guide the development of a strategic communications program
- Develop communications program planning documents that

support the adoption of the program by higher level decision-makers

- Develop messaging strategy
- Produce professional-level content that fulfills vision and goals of the organization and the objectives of the specific communications program, using formative evaluation
- Create a multi-platform, multi-public message dissemination
   plan
- Gather appropriate data to evaluate the effectiveness of a strategic communications program
- Deliver professional-level presentation that explains and supports program plans, creative messaging strategy, produced content, and dissemination and evaluation plans

#### **Degree Requirements**

(12 courses; 54 quarter units)

To receive a Master of Arts in Strategic Communications, students must complete at least 54 quarter units of graduate work, of which a minimum of 40.5 quarter units must be taken in residence at National University. Students can transfer up to 13.5 quarter units at the graduate level from a regionally accredited institution in the areas of communication or business, provided the units have not been used to satisfy the requirements of an awarded degree. Students wishing to transfer credits into the program should contact the program faculty advisor. Refer to the section in the graduate admission requirements for additional specific information regarding application and evaluation.

#### **Core Requirements**

(11 courses; 49.5 quarter units)

| COM 600 | Communication Skills in the Global Environment         |
|---------|--|
| COM 605 | Content Distribution Processes and Technologies        |
| COM 610 | Integrated Marketing Communications                    |
| COM 615 | Integrated Marketing Communications Research           |
| MKT 635 | Advertising Management and Marketing                   |
|         | Communications   |
|         | (Prerequisite: MKT 402A or MKT 602)                    |
| COM 620 | Crisis Communications and Management                   |
| COM 630 | Communications Program Measurement and Evaluation      |
| MGT 605 | Organizational Management and Leadership               |
| COM 640 | Persuasion and the Content Creation Process            |
| COM 650 | Legal and Ethical Issues in Professional Communication |
| COM 660 | Capstone Project                                       |
|         |  |

#### Elective

(1 course; 4.5 quarter units)

Students may take any graduate level course with the approval of the program lead faculty, provided that they have completed all prerequisites for that course.

### ■ MASTER OF FINE ARTS IN DIGITAL CINEMA<sup>®</sup>

(715-506)

Faculty Advisor: E. Alyn Warren III • (714) 429-5131 • awarren@nu.edu

The Master of Fine Arts in Digital Cinema (MFA-DC) provides graduates with a foundation in film history and theory and in-depth study of digital motion picture production and post-production. The program focuses on developing well-round filmmakers versed in all aspects of film production and screenwriting with the ability to work on low budget, independent and documentary style filmmaking. Students produce a professional digital cinema portfolio tailored to the student's interests, needs and desire for self-development. The program prepares graduates to work in a variety of production capacities in the following fields: commercial or industrial film and television, digital entertainment media, and communication, educational or instructional media production. The goal of the program is to develop both the critical acumen and technical abilities of students in the area of visual communication and media. Graduates will develop the ability to generate screenplays, to plan and produce film and video projects, and to critically evaluate film and video projects based on theoretical models in communication, media, information design and film aesthetics.

The MFA-DC program is composed of nine online courses, one hybrid, online/onsite course and two courses offered in an accelerated one-month onsite residency format. In the area of film theory and criticism, students take two online elective courses in film studies or a graduate level course in a related area. Three additional on-line courses cover cinematography, directing, digital editing and producing digital cinema projects from development to release. The online screenwriting workshop provides students the opportunity to generate a narrative style screenplay, and students may choose between documentary and advanced screenwriting depending upon their thesis project and professional interests. Together these courses provide the theoretical and practical foundations for the art of digital filmmaking.

#### **Onsite Residency Classes**

In preparation for the thesis production project, students take three courses: one online-onsite hybrid course in directing and production management, and two accelerated production courses, digital cinema production and digital post-production, in an onsite "residency" at a National University learning center. These three courses function as pre-thesis practica, providing students with hands-on production experience in a collaborative environment using professional equipment.

The residency classes consist of MDC 683 (hybrid one month online and one month onsite) and the onsite intensive courses MDC 688 (first two weeks) and MDC 689 (second two weeks). The hybrid course begins online to prepare students in directing and preproduction for the two-week intensive digital production course. The Directing and Production Management course continues onsite during both the digital production and the subsequent two-week course in digital post-production. Students may elect to split the residency into two periods. During the first phase a student would take MDC 689 and then return to take MDC 683 and MDC 688, which must be taken concurrently.

A production equipment fee for digital production equipment is an additional cost of these practica courses. The fee covers rental of professional digital camera, lighting and sound equipment and other production related expenses. The costs for accommodations and transportation related to the residency are not included in the tuition or fees and are the responsibility of each student. For more information, contact the program faculty advisor.

#### **Digital Portfolio**

The MFA-DC digital portfolio functions as a filmmaker's digital cinema reel and demonstrates the students proficiency in selected areas of study. Student products from all the courses that are featured in the professional digital portfolio include short samples of editing and cinematography assignments, a production budget and storyboards, a screenplay, artist's self-reflections and other production and post-production documentation.

#### Thesis

To Receive a Master of Fine Arts in Digital Cinema, candidates must enroll in the online course MDC 691, Thesis Production, with the thesis advisor. Students will keep in regular communication with their thesis advisor through the online course interface, Internet and

telephone conferencing. The program advisor will assist the student in assembling a three-person committee to evaluate the thesis and digital portfolio collection of previous work. To graduate a student must submit the thesis project and digital portfolio for evaluation by the thesis committee within one year of the acceptance of the MDC 691 thesis proposal.

The thesis project consists of a short subject digital motion picture, a written component that demonstrate the student's ability to communicate coherently, critically, and creatively and a selected professional digital reel/ portfolio. The written component of the thesis, include a project proposal, treatment/synopsis, shooting script, budget and production documentation, a critical analysis of the project and relevant genre influences, and a personal evaluation of the portfolio work and the filmmaker's evolution as an artist. The thesis committee evaluates the digital portfolio, short subject motion picture project and written thesis submitted on DVD and determines whether the student has mastered the requirements for the MFA in Digital Cinema.

#### **Program Learning Outcomes**

At the completion of the Master of Fine Arts in Digital Cinema, students will possess the knowledge and skills needed to produce a professional quality digital motion picture and to participate in the ongoing scholarly and critical discussions of issues in the field of film, film theory and criticism. Specifically, by the end of this program, students will be able to:

- Conduct independent research and apply relevant criticism in sustained analyses and interpretations of specific films.
- Engage in informed critical discussion, both oral and written, that evaluates theoretical issues pertaining to cinematography, editing and/or directing.
- Engage in informed critical discussion, both oral and written, that evaluates the works and criticism of film directors, periods and genres.
- Participate in rigorous critiques of the creative works of others.
- Plan, produce and edit digital motion picture shots, sequences and shorts in a graduate level workshop setting.
- Generate a narrative screenplay and/or a documentary production treatment that is original, significant and complex enough to engage and sustain the interest of a discriminating audience.
- Generate the requisite documentation required to produce, direct, edit and distribute a digital short motion picture.
- Communicate effectively with others, both orally and in writing, during the development, preproduction, production and postproduction phases of filmmaking.
- Synthesize current theory and practice by integrating professional cinematography and visual and sound editing techniques in the production of digital motion pictures.
- Create an original short motion picture that is significant and complex enough to engage and sustain the interest of a discriminating audience and is suitable for submission to a film festival.

#### **Application Requirements**

To be considered for admission, applicants must meet the University graduate admission requirements listed in the general information for graduate degrees.

Students are expected to possess or have access to a computer and high-speed Internet connection including an email account outside of National University for course projects and assignments.

Given the nature of digital video production and editing, students must have personal access to a computer that meets the system

requirements for professional digital video editing software currently available, specifically AVID Express Pro. (NOTE: the residency postproduction course is conducted on AVID Express Pro and students are expected to have a working knowledge of the software interface at the time of the residency. See the manufacturer's web site for system requirements.) The student should also have an external FireWire 400 or 800 (IEEE 1394) hard-drive for media storage, to possess or have access to a digital still camera, a digital video camera (MDC 650, 651 and 652) and the following required software: Microsoft Office (Word, Excel, PowerPoint, Internet Explorer) or comparable software capable of outputting PDF documents, a variety of standard browser plug-ins (i.e. JavaScript, Flash, Shockwave, QuickTime, etc.), Adobe Photoshop Elements (or equivalent photo image processing program), Apple QuickTime Pro and the above mentioned AVID Express Pro or a comparable digital video editing software package. A digital scanner is also recommended. Students are responsible for arranging their own accommodations and transportation during the onsite residency. Production fees for digital film production workshops and course materials are in addition to the course tuition. The required production fees are in the amount of \$325 for MDC 688 and \$325 for MDC 689. For more information on any of the above requirements contact the program advisor.

#### **Degree Requirements**

(12 courses; 54 quarter units)

To receive a Master of Fine Arts in Digital Cinema, students must complete at least 54 quarter units of graduate work, of which a minimum of 49.5 quarter units must be taken in residence at National University. Students can transfer up to 4.5 quarter units at the graduate level from a regionally accredited institution in the areas of communication, film studies or media studies, provided the units have not been used to satisfy the requirements of an awarded degree. Students wishing to transfer credits into the program should contact the program faculty advisor. Refer to the section in the graduate admission requirements for additional specific information regarding application and matriculation.

#### **Program Prerequisites**

It is expected that students have acquired the basic practical knowledge and skills needed to operate entry-level video editing software prior to attending courses. Students who do not have such experience or skills should take a class on digital video editing such as MUL 265 Digital Audio and Video or equivalent prior to taking MDC 650, 651 or 652. It is recommended that students have had undergraduate courses or experience in some of the following areas: communication, film, literature, media studies, graphic design, multimedia arts, history, philosophy, psychology or sociology. For more information contact the program advisor.

#### Advancement to Candidacy

After the successful completion with a minimum grade no lower than a "B" in the production courses (MDC 650, 651, 652, 653, 683, 688, 689), a student is qualified for advancement to candidacy for the Master of Fine Arts in Digital Cinema. Qualified students are responsible for notifying the program faculty advisor in writing of the desire to proceed to assigns the student to a thesis course.

#### **Core Requirements**

(9 courses; 40.5 quarter units)

| MDC 650 | Producing Digital Cinema              |
|---------|---------------------------------------|
|         | 0 0                                   |
| MDC 651 | Digital Cinematography                |
| MDC 652 | Digital Video Editing                 |
| MDC 653 | Film Directing Process and Techniques |
| MDC 680 | Screenwriting                         |
| MDC 683 | Directing and Production Management   |

(Prerequisite: MDC 651, MDC 652 and MDC 653)

| MDC 688 | Digital Cinema Production                              |
|---------|--|
|         | (Prerequisite: MDC 651 and MDC 653 and concurrent with |
|         | MDC 683)   |
| MDC 689 | Digital Cinema Post-Production                         |
|         | (Prerequisite: MDC 650 and MDC 652)                    |
|         |  |

MDC 691 Thesis Production (Prerequisite: all other MDC core courses)

#### **Specialized Study**

(1 course; 4.5 quarter units)

| MDC 670  | Producing Documentaries            |
|----------|------------------------------------|
| or       |                                    |
| MCW 680A | Advanced Workshop in Screenwriting |
| _        | (Prerequisite: MDC 680)            |

#### Electives

(2 courses; 9 quarter units)

To complete the program, students can select electives from any of the following Film Studies courses or apply for equivalency with a graduate level course in media studies, media production, art or literary criticism, narrative or dramatic writing or theory.

| ENG 665 | Film Theory                    |
|---------|--------------------------------|
| ENG 666 | Film History: The Silents      |
| ENG 667 | Film History: American Film    |
| ENG 668 | Film Genre Studies             |
| ENG 669 | World Film                     |
| ENG 685 | Great Directors: American      |
| ENG 686 | Great Directors: International |

### ■ MASTER OF FINE ARTS IN VIDEO GAME PRODUCTION AND DESIGN

(715-507)

Faculty Advisor: Tim Langdell • (858) 642 8466 • tlangdell@nu.edu

The Masters of Fine Arts in Video Game Production and Design (MFA-GP) will provide graduates in the theory and practice of video game design and all stages of game production from initial concept, through development to post-production testing and finally the marketing of the end product. The program focuses on developing well rounded game producers who are well versed in all aspects of how a professional videogame is made, equipping them to work on a full range of projects from low-budget independent studio games to large-scale high-budget major game productions. Students will produce professional game design documentation and develop a digital portfolio that includes a game prototype, art and sound assets.

The goal of the program is to develop both the critical acumen and technical abilities in the area of interactive entertainment and digital media. Early in the program, students gain a deep understanding of how to design a game, taking into account all aspects of art, animation, sound, and technical requirements, game level design, narrative forms and postproduction processes. As the program progresses, students will create their own original game design that they will fully document while concurrently acquiring deep knowledge of the game production process. Using the skills they have acquired in the art, animation and game scripting courses, students will build a prototype of their game and present a final thesis that incorporates a self evaluation of the design and production process.

#### **Program Learning Outcomes**

At the completion of the Master of Fine Arts in Video Game Production and Design, graduates will emerge with a deep knowledge of the theory of game design, a thorough knowledge of all aspects of developing a game, together with practical skills for effective management of game production teams.

By the end of this program, students should be able to:

- Apply team management theory and skills by collaborating with design development and production teams
- Develop commercial design documents that guide the development of a game project
- Use production documents in the development of a game prototype
- Apply narrative structures in the development of a game script
- Evaluate video game designs from aesthetic, business and technical perspectives
- Distinguish level criteria in the design of a game
- Produce a video game prototype
- Implement game prototype testing
- Specify and implement art, animation, sound, technical requirements
- · Revise game components during postproduction

#### Thesis

To qualify for the Master of Fine Arts in Video Game Production and Design, candidates must complete a thesis project while enrolled in MGP 691, Thesis Production. Working with a thesis advisor, an MFA candidate must develop, design and produce am original video game prototype. To graduate a candidate must submit a completed thesis project and digital portfolio for evaluation by the thesis committee within one year of the start of MGP 691. The thesis committee evaluates the thesis and game prototype to determine whether the student has met the requirements for the MFA in Video Game Production and Design.

The complete thesis project consists of a game design document based on an original game concept devised by the student, a prototype of the game design demonstrating key features of the design concept, a digital portfolio of game art and sound assets and a critical evaluation of that project and video game design and production.

The written portion of the thesis demonstrates the candidate's ability to communicate coherently, critically and creatively. The written thesis evaluation should cover all aspects of video game design, development and production as studied in the program and reflected in the student's project. The candidate also evaluates the relevant design components and technical considerations involved in the game.

During the thesis period, candidates will keep in regular communication with their thesis advisor through an online course interface, Internet and telephone conferencing. The thesis advisor will assist the student in assembling a three-person committee to evaluate the completed thesis project and a digital portfolio of the candidate's previous work.

#### **Application Requirements**

To be considered for admission, applicants must meet the University graduate admission requirements listed in the general catalog under information for graduate degrees.

#### **Degree Requirements**

(12 courses; 54 quarter units)

To receive a Master of Fine Arts in Video Game Production and Design, students must complete at least 54 quarter units of graduate work, of which a minimum of 45 quarter units must be taken in residence at National University. Students can transfer up to 9 quarter units at the graduate level from a regionally accredited

institution in the areas of film production, interactive design or digital media studies, provided the units have not been used to satisfy the requirements of an awarded degree. Students wishing to transfer credits into the program should contact the program faculty advisor. Refer to the section in the graduate admission requirements for additional specific information regarding application and matriculation.

#### **Core Requirements**

(12 courses; 54 quarter units)

| MGP 650 | Video Game Production                |
|---------|--------------------------------------|
| MGP 651 | Designing for Interactive Media      |
| MGP 652 | Writing for Games                    |
| MGP 653 | Art and Sound Design                 |
| MGP 654 | Game Production Documentation        |
|         | (Prerequisites: MGP 650 and MGP 651) |
| MGP 670 | Game Scripting and Prototyping       |
| MGP 671 | 3D Art, Animation and Motion Capture |
| MGP 680 | Advanced Workshop in Game Design     |
|         | (Prerequisite: MGP 651)              |
| MGP 683 | Game Production Management           |
|         | (Prerequisite: MGP 654)              |
| MGP 688 | Game Testing and Postproduction      |
|         | (Prerequisite: MGP 650 or MGP 651)   |
| MGP 689 | The Business of Games                |
| MGP 691 | Thesis Production                    |
|         | (Prerequisite: all core courses)     |
|         |                                      |

## ■ MASTER OF SCIENCE IN EDUCATIONAL AND INSTRUCTIONAL TECHNOLOGY <sup>(\*)</sup>

#### (720-503)

E. George Beckwith • (909) 806-3347 • ebeckwit@nu.edu

The Master of Science in Educational and Instructional Technology is designed for students who want to participate in the paradigm changes that technology is precipitating in both education and training, as human learning moves from print and classroom-based instruction to digital media. The history and effectiveness of change processes and the role of technology in human learning are key components to the program.

This program divides into two specializations, an Educational Technology Specialization for K-12 and higher education bound educators, and an Instructional Technology Specialization for corporate and private industry instructional designers and trainers. Those in the Educational Technology specialization will develop expertise in both designing and conducting technology-facilitated instruction. These graduates will be prepared to enter education careers such as K-12 technology coordination, site administration, home school and virtual school instruction, and online instruction in higher education. Those in the instructional technology specialization prepare for the rapidly growing employment opportunities available to people skilled in applying emerging information and telecommunication technologies to solving instructional problems. These graduates will be capable of applying their knowledge and skills to any situation in which digital technologies hold the potential for improving instruction-especially, business, and industry, and governmental agencies.

This program emphasizes practical applications by offering extensive technical training in a variety of software. The program culminates with a final technology project that applies the theory and practice of educational and instructional technology.

#### **Program Outcomes**

Graduates of this program will be able to:

- Conduct a needs assessment, including analysis of subject matter, job/task, audience, and context.
- Demonstrate the ability to make interdisciplinary connections between technology, psychology, and computer-assisted interactive communications by preparing a multimedia product report.
- Complete an instructional design project, utilizing appropriate instructional design models.
- Design and implement an instructional module, demonstrating knowledge of and skill in the multimedia development cycle.
- Identify and evaluate effective methods for teaching adult learners using available technologies.
- Design an instructional module delivered through a completely digital form of distance education, and evaluate its effectiveness.
- Research, analyze and document the social, political, economic, and educational consequences of the continued growth of the World Wide Web for all learners.
- Evaluate the instructional effectiveness of a game/simulation, and embed as a component of a multimedia product.
- Demonstrate mastery of project management skills in the implementation of a large scale instructional design project.
- Write functional specifications for an instructional product and assess the costs and benefits of the chosen modes of development and delivery.

#### **Degree Requirements**

(10 courses; 45 quarter units)

To obtain a Master of Science in Educational and Instructional Technology, students must complete 45 quarter units of graduate work. Where appropriate, students can transfer a maximum of 13.5 quarter units of graduate work completed at another regionally accredited institution to meet stated requirements in the program. Students should refer to the section on graduate admission requirements for specific information regarding application and matriculation.

Students are expected to possess or to have access to a computer outside of National University to work on projects both on and off campus.

Given the nature of educational and instructional technology, the offcampus computer *should have a high speed connection and* have at least 1.6 GHz of processing speed with 512 MB RAM. In addition students should have access to MS Office (Word, PowerPoint, Excel, and Internet Explorer), as well as Adobe Dreamweaver 8. More software may be required depending on courses selected. *Finally, students must also have access to a computer headset with microphone for iLinc synchronous Video Teleconferences*.

#### **Program Prerequisites**

Candidates seeking admission to the program must possess a baccalaureate degree in good academic standing from a regionally accredited institution. Students considering this program should contact the program lead faculty prior to enrollment.

#### **Core Requirements**

(4 courses; 18 quarter units)

| EDT 601 | Instructional Design          |
|---------|-------------------------------|
| EDT 603 | Advanced Instructional Design |
| EDT 607 | Multimedia in Instruction     |
| EDT 609 | Distance Learning             |

Students will choose between one of the following two specializations: (4 courses; 18 quarter units)

## ▲ Specialization in K-12 and Higher-Ed

### Classrooms

(720-503-510)

| EDT 605 | Technology and Educational Theories and Practice       |
|---------|--|
| EDT 612 | Creating Meaningful Learning with Technology           |
| EDT 614 | The Effect of the Internet on the Meaning of Schooling |
| EDT 616 | Motivating Learners through Gaming and Simulation      |

#### ▲ Specialization in Corporate, Military, and Government Training

(720-503-511)

- EDT 611 Current Issues in Instructional Technology
- EDT 613 Simulations and Virtual Reality
- EDT 615 Seminar in Performance Technology
- EDT 623 Web-Based Instruction

#### **Integration Seminars and Project**

(2 courses; 9 quarter units)

- EDT 693 Evaluating and Improving Instructional Programs
- EDT 695 Educational and Instructional Technology Capstone Project





The University of Values

National University's Henderson Campus has been authorized by the State of Nevada Commission on Post Secondary Education to offer the following programs onsite. In addition, the State of Nevada's Department of Education has approved all teacher education programs leading to teacher licensing in the State of Nevada. The Master of Arts in Counseling Psychology meets the academic requirements necessary to sit for the Marriage and Family Therapist License examinations mandated by the State Board of Examiners for the State of Nevada.

## Nevada Programs

Associate of Science in Health Science and Pre-Nursing Bachelor of Arts with a Major in Arabic Studies Bachelor of Business Administration Bachelor of Public Administration Bachelor of Science in Criminal Justice Administration Master of Education in Elementary Education with Nevada Licensure Program Master of Education in Secondary Education with Nevada Licensure Program Master of Science with Licensure in Special Ed Master of Arts in Teaching Master of Arts in Counseling Psychology Master of Business Administration Master of Forensic Science Master of Public Administration Master of Science in Organizational Leadership

## **Financial Aid**

In addition to the financial aid outlined in the financial aid section of the catalog, the following programs are available to Nevada residents:

#### State Grants

Nevada public colleges and universities offer various grant opportunities that are funded by the state. Each college has designed programs that best serve its student population. Some programs are only for Nevada residents, while others are open to nonresidents. Most grants are need-based, but some may not require documented need. Information on two of the grant programs follows. Keep in mind that not all programs are offered at all colleges.

#### Access Grant

The Access Grant is for undergraduate and graduate students who have financial need and are Nevada residents. The maximum award is \$3,000 for graduate students and \$2,500 for undergraduates, but the amount can vary depending on your cost of attendance, enrollment status, living arrangements and availability of funds.

#### Nevada Student Incentive Grant

This grant is for qualified low-income undergraduate and graduate students who are Nevada residents. The award amount varies by type of colleges, college costs, enrollment status and living arrangements.

#### **Tribal Scholarships**

If you're a Native American, your tribe or nation may offer scholarships. To learn more, contact your tribe or call the regional office of the Bureau of Indian Affairs in Sacramento, California, at (916) 978-6058 or go to www.oiep.bia.edu. Many tribes and the BIA require a "needs analysis" from the college's financial aid office to document eligibility, so be sure to file your FAFSA early. You'll also find scholarships for Native Americans at www.collegefund.org.

#### **Foster Youth Grants**

Up to \$5,000 a year for college or vocational training is available for foster youth who have aged out of foster care or who were adopted after age 16. To learn more, talk to your high school counselor, your independent living coordinator, your college's financial aid administrator, go to www.statevoucher.org and click on "Nevada," or call (775) 684-4450.

A number of foundations also offer tuition waivers and scholarships for foster youth. The Otto A. Huth Scholarship Trust Fund is available to children who have been in the custody of the Nevada Division of Child and Family Services in a foster or group home. The application deadline is March 15 of each year. For more information, go to www.dcfs.state.nv.us (click on "Scholarships"). In addition, the CASA Foundation provides up to \$500 per semester for foster youth. For details, call (702) 455-4306.

## **Refund Policy – Nevada Only**

Students are accepted and registered for classes with the understanding that they will attend the entire course. Faculty contracts, the commitment of space, and other University resources are made on that assumption, creating financial obligations that students who withdraw must share. National University's refund policy reflects this position. Students may use the self-service function on the student web portal to withdraw themselves from class prior to midnight of the ninth (9th) day of the session, or they may ask an admissions advisor to withdraw them.

To accurately count session days, note that the first day of a session – **not** the actual day a student attends class – counts as day one of that session. The University counts calendar days rather than business days for determining refunds. As such, if the first day of the session is a Monday, the student would need to withdraw prior to midnight of the following Tuesday, the ninth day of that session.

If a student taking an onsite class in Nevada does not complete a course, a tuition refund is made according to the following schedule, which is based upon a 28-day month.

Students who withdraw from a course prior to midnight of the:

ninth (9th) day of the session will receive a 100 percent refund tenth (10th) day of the session will receive a 64 percent refund eleventh (11th) day of the session will receive a 60 percent refund twelfth (12th) day of the session will receive a 57 percent refund thirteenth (13th) day of the session will receive a 54 percent refund fourteenth (14th) day of the session will receive a 50 percent refund fifteenth (15th) day of the session will receive a 46 percent refund sixteenth (16th) day of the session will receive a 43 percent refund seventeenth (17th) day of the session will receive a 40 percent refund

Students who withdraw from a course after midnight of the seventeenth (17th) day of the session will not receive a refund.

Students must have a credit balance in their account to receive a refund. Refunds, depending on the verification of funds, are processed and mailed within fifteen (15) days from the later of: a) the date from when a student cancels enrollment; b) the date from when the institution terminates a student's enrollment; c) the last day of an authorized leave of absence (if the student fails to return after this period); or d) the last day of attendance of a student. All refunds are mailed to the student's home address. Students must make sure that the address on file is correct.

### ■ ASSOCIATE OF SCIENCE IN HEALTH SCIENCE AND PRE-NURSING

(602-125)

Faculty Advisor: Michael Maxwell • (858) 642-8413 • mmaxwell@nu.edu See College of Letters and Science Listings

### BACHELOR OF ARTS, Major in Arabic

#### Studies

(610-448)

Faculty Advisor: Mahmoud Dabbagh • mdabbagh@nu.edu See College of Letters and Science Listings

### BACHELOR OF ARTS, Major in Early

## Childhood Education (610-444)

Lead Faculty: John Carta-Falsa • (858) 642-8380 • jcartafa@nu.edu See School of Education Listings

### BACHELOR OF BUSINESS ADMINISTRATION

(630)

Faculty Advisor: Ramon Corona • (858) 642-8427 • rcorona@nu.edu See School of Business and Management Listings

### ■ BACHELOR OF PUBLIC ADMINISTRATION

(640)

*Faculty Advisor: Chandrika Kelso* • (858) 642-8433) • *ckelso@nu.edu* See College of Letters and Sciences Listings

# ■ BACHELOR OF SCIENCE IN CRIMINAL JUSTICE ADMINISTRATION

(620)

*Faculty Advisors: James Larson* • (858) 642-8418 • *jlarson@nu.edu* See College of Letters and Sciences Listings

## ■ MASTER OF ARTS IN TEACHING (710-716)

Program Faculty Advisor: Caprice Houston-Bey • (702) 531-7833 • chouston-bey@nu.edu See School of Education Listings

Candidates for the Master of Arts in Teaching (MAT) degree must already hold a Nevada teaching license. The MAT program does not meet the standards of quality for licensure or endorsement in teaching in public education in Nevada. Students should speak with the faculty advisor regarding area of specialization selection.

#### ■ MASTER OF BUSINESS ADMINISTRATION (730)

*Faculty Advisor: Bruce Buchowicz* • (858) 642-8439 • *bbuchowicz@nu.edu* See School of Business and Management Listings

## MASTER OF FORENSIC SCIENCES

(760)

Faculty Advisor: Ismail Sebetan • (858) 642-8419 • isebetan@nu.edu See College of Letters and Sciences Listings

#### 

Faculty Advisor: Chandrika Kelso • (858 642 8433) • ckelso@nu.edu See College of Letters and Sciences Listings

## Nevada Programs

### ■ MASTER OF SCIENCE IN ORGANIZATIONAL LEADERSHIP

(720-815)

Faculty Advisor: Julia Buchanan • (858) 642-8453 • jbuchanan@nu.edu See School of Business and Management listings

COLLEGE OF LETTERS AND SCIENCES

### MASTER OF ARTS IN COUNSELING PSYCHOLOGY

(710-505)

Faculty Advisor: Don Posson • (702) 531-7832 • dposson@nu.edu

The Master of Arts in Counseling Psychology is designed for students who are preparing to practice individual, couples, family, adolescent, and child psychotherapy. This degree is designed to prepare candidates to sit for the Marriage and Family Therapist (MFT) License examination mandated by the State Board of Examiners for the State of Nevada. The degree may not meet requirements in other states. Students should consult the licensing board of the appropriate state for information about MFT licensure outside of Nevada. The primary program outcomes and competencies are:

- Entry level expertise in the diagnosis of mental disorders.
- Entry level expertise in development of a treatment plan.
- Entry level expertise in the implementation of treatment plans.Professional integrity and legal and ethical standards with
- clients and staff.
- Entry level competence in case presentations, oral reports, and written reports.
- Theoretical and clinical knowledge.
- Graduate level competency in theoretical research and written reports.
- Competency in psychopharmacology.
- Competency in multi-cultural awareness and diversity as it pertains to clinical situations of assessment and treatment.
- Competency in knowledge of human development (child, adolescent, and adult).
- Entry level competency in a broad range of clinical orientations and therapies.

#### **Application Requirements**

Students interested in enrolling in this program should contact the appropriate campus for further information regarding the application process.

To be considered for admission, applicants must meet the University graduate admission requirements listed in the general information for graduate degrees as well as the Master of Arts in Counseling Psychology program criteria. All applicants are evaluated in terms of the requirements for preparation for the psychotherapy profession, regardless of career goals. Students must submit an application packet, pass a personal interview, and attend the program orientation before they may begin classes.

Students should consult the regional faculty to determine at what point in the sequence they may enter the program. Entrance points may differ in each region.

#### **Degree Requirements**

(20 courses; 89 quarter units)

To receive the Master of Arts in Counseling Psychology degree students must complete at least 89 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Students should refer to the section on

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graduate admission requirements for specific information regarding application and evaluation. In addition:

- Students must complete all course work with a grade of "B" or better. Students who receive a grade of "C+" or lower in two (2) or more courses must repeat all such courses before being allowed to continue in the program.
- Students must complete a minimum of 20 hours of individual, marital, family, or group psychotherapy before taking PSY 631A and another 20 hours before graduation for a total of 40 hours.
- Students must obtain a total of 400 hours of counseling experience at a designated practicum site with an approved practicum site supervisor during PSY 631B, PSY631C, and PSY 631D. Three hundred of the 400 hours must involve face-to-face psychotherapy with clients.
- Independent studies are not allowed in this program without departmental approval.
- Students may not take more than one course per month.
- Students seeking licensure must register with the Nevada Board of Licensure after graduation and fulfill all Nevada licensing requirements.
- Students are also urged to join the American Association of Marriage and Family Therapists. Students must obtain malpractice insurance through A.A.M.F.T. or another professional organization.
- Students must complete all course work within seven years. Any courses taken more than seven years ago must be repeated.

#### Program Prerequisite Recommended Preparation

(1 course, 4.5 quarter units)

PSY 429 Introduction to Personality Theory

Candidates who have not previously completed this course or its equivalent are strongly urged to do so. PSY429 can be taken either online or in a classroom.

#### **Program Core Requirements**

(20 courses; 89 quarter units)

These courses are scheduled on a limited basis. Students are encouraged to consult the regional faculty for the course sequence requirement, which may differ in each region. Enrollment in these courses is limited to MA Counseling Psychology students unless the course is specifically listed in another degree.

| PSY 635   | Development Contexts in Psychotherapy: Childhood     |
|-----------|--|
|           | and Adolescence                                      |
| PSY 629A  | Development Contexts in Psychotherapy: Adulthood     |
| DO1 ( (50 | and Aging  |
| PSY 653   | Research: Paradigms and Critiques                    |
| PSY 623A  | Perspectives on Psychopathology Individual           |
|           | Psychotherapy and Clinical Assessment I              |
| PSY 623B  | Principles of Psychotherapy I: Assessment and        |
|           | Interventions Individual Psychotherapy and Clinical  |
|           | Assessment II  |
| PSY 636   | Principles of Psychotherapy II: Child and Adolescent |
| PSY 632A  | Couples/Family Therapy A                             |
| PSY 632B  | Couples/Family Therapy B                             |
| PSY 628   | Principles of Psychotherapy III: Group Approaches    |
| PSY 627   | Legal and Ethical Issues in Marriage and Family      |
|           | Therapy  |
| PSY 631A  | Practicum I: Marital and Family Therapy              |
|           | (Prerequisite: Department approval)                  |
| PSY 631B  | Practicum II: Marital and Family Therapy*            |
|           | (Prerequisites: PSY 631A and Department approval)    |
| PSY 631C  | Practicum for MFT Trainees II** (4 quarter units)    |
| 101 0010  | (Prerequisites: PSY 631A and Department approval)    |
| PSY 631D  | Practicum for MFT Trainees III** (4 quarter units)   |
| 1010010   | (Prerequisites: PSY 631A and Department approval)    |
| PSY 637   | Principles of Psychotherapy V: Cultural Competencies |
| 151057    | i incipies of i sychomerapy v. Cultural Competencies |

| PSY 624 | Assessment Techniques for Marriage and Family |
|---------|---|
|         | Therapists                                    |
| PSY 642 | Relational Violence                           |
| CHD 640 | Addictions: Contexts and Treatments           |
| PSY 626 | Human Sexuality in Psychotherapy              |

PSY 655 Psychopharmacology

#### **Nevada Practicum Requirements**

The Nevada State Board of Examiners for MFTs requires that applicants for Nevada licensure have completed at least three courses in practicum over no less than one year. Nevada students are required to take each of the following courses designed to meet the requirements of the Nevada State Board of Examiners.

| PSY 631B | Practicum II: Marital and Family Therapy*   |
|----------|---|
| PSY 631C | (Prerequisites: PSY 631A and Department approval)   |
| PS1 651C | Practicum for MFT Trainees II** (4 quarter units)<br>( <i>Prerequisites: PSY 631A and Department approval</i> ) |
| PSY 631D | Practicum for MFT Trainees III** (4 quarter units)<br>(Prerequisites: PSY 631A and Department approval)         |

\*This seminar meets once a week for two hours during six consecutive months in addition to the onsite practicum requirements. This seminar may meet in the late afternoon. \*\* This seminar meets once a week for two hours during three consecutive months in addition to the onsite practicum requirements. This seminar may meet in the late afternoon.

#### SCHOOL OF EDUCATION

#### ■ MASTER OF EDUCATION IN ELEMENTARY EDUCATION WITH NEVADA LICENSURE (750-717)

Faculty Advisor: Caprice Houston-Bey • (702) 531-7833 • choustonbey@nu.edu

The Master of Education in Elementary Education with Nevada Licensure is designed for students who are committed to being instructional leaders in the K-8 setting. Courses for this degree meet the Nevada Department of Education requirements for an initial teaching license. They also meet requirements for a master's degree from National University that inter-relates theory and practice and promotes lifelong learning. The program is intended for students who want to obtain an initial teaching license and master's degree at the same time.

To receive a Master of Education in Elementary Education with Nevada Licensure, students must complete at least 66 quarter units of graduate work, 52.5 of which must be taken in residence at National University. Students enrolled in the joint degree-licensure program will not be awarded the master's degree until they complete all graduate and licensure coursework, including student teaching.

The student teaching courses are required for the initial teaching license. Students must have met subject matter competency prior to student teaching. Elementary and Secondary Education teacher candidates meet subject matter competence by passing the appropriate Praxis II examinations. Candidates must meet all state requirements for the Elementary Education Teaching License to apply to the Nevada Department of Education for licensure. An electronic portfolio is required for the assessment of all teacher licensure candidates. The purpose of the portfolio is for candidates to show how their work in teacher education is linked to their own competency in the Domains of Professional Competence. The portfolio must be reviewed and approved by a National University faculty member prior to exiting the licensure program.

#### **Program Requirements**

(14 courses; 66 quarter units)

| TED 615                       | Foundations of Education                                 |
|-------------------------------|--|
| TED 605 The Diverse Classroom |  |
| EXC 625                       | Exceptional Children in the Classroom                    |
| TED 621A                      | Language Development Methodology for Elementary          |
|                               | Schools  |
| TED 621B                      | Reading and Language Arts Methodology for                |
|                               | Elementary Schools                                       |
| TED 668                       | Survey of Multicultural Literature                       |
| TED 616A                      | Curriculum and Instruction I: History and Social Science |
| TED 616B                      | Curriculum and Instruction II: Mathematics and Science   |
| TED 616C                      | Curriculum and Instruction III: Visual and Performing    |
|                               | Arts, Health and Physical Education                      |
| TED 640A                      | Student Teaching I (6 quarter units)                     |
| TED 640B                      | Student Teaching II (6 quarter units)                    |
| TED 649                       | Classroom Management & The Student Teaching              |
|                               | Seminar  |
| MAT 644                       | Cultural Democracy: Contemporary, Local and Global       |
|                               | Issues   |
| MAT 640                       | Applications of Research for the Art of Teaching         |

#### **Course of Study**

National University's Professional Teacher Preparation program is structured around courses grouped into intra-related and interrelated family courses focused on themes of foundations, education methods, and student teaching. Theory and practice as well as coursework and field experiences are developmental as candidates move from the foundation family courses to the method family courses and into "student teaching. Candidates who successfully complete the Professional Teacher Preparation program are eligible for a teaching license; those who choose to earn a Master in Education degree must complete two additional courses.

#### **Foundation Courses**

The three foundation courses are considered the foundation course family because all the courses build upon each other in terms of conceptual knowledge and skill, field experiences, and assessments. Furthermore, two of the three courses share all three required textbooks so that teacher candidates can integrate foundational perspectives into an on-going and ever developing professional educator philosophical statement. The foundation course family is the theoretical basis for skill development and acquisition in the method courses. The courses that comprise this family are:

- TED 615 Foundations of Education
- TED 605 The Diverse Classroom
- EXC 625 Exceptional Children in the Classroom

#### **Methods Courses**

As are the foundations courses, the pedagogy courses are formed around adult learning theory and fieldwork. So that each candidate gains a clear understanding of the realities of public education, the program's coursework and field experiences are interrelated to form a cohesive set of learning experiences. Teacher Performance Expectations (TPEs) inherent in the Domains of Professional Competence are highlighted throughout each course syllabus and course outline, and must be highlighted in each lesson plan developed by candidates so that each candidate will have extensive opportunities to learn and to teach.

#### **Elementary Education**

- TED 621A Language Development Methodology for Elementary Schools.
- TED 621B Reading and Language Arts Methodology for **Elementary Schools**

- TED 668 Survey of Multicultural Literature
- TED 616A Curriculum and Instruction I: History and Social Science
- TED 616B Curriculum and Instruction II: Mathematics and
- TED 616C Curriculum and Instruction III: Visual and Performing Arts, Health and Physical Education

#### Student Teaching

| TED 649  | Classroom Management & The Student Teaching<br>Seminar |  |
|----------|--|--|
|          | Student Teaching I (6 quarter units)                   |  |
| TED 640B | Student Teaching II (6 quarter units)                  |  |

#### **Master in Education**

- MAT 644 Cultural Democracy: Contemporary, Local and Global Issues
- MAT 640 Applications of Research for the Art of Teaching (Must be taken as the last course in the Master of Education program.)

#### MASTER OF EDUCATION IN SECONDARY EDUCATION WITH NEVADA LICENSURE (750-718)

Faculty Advisor: Caprice Houston-Bey • (702) 531-7833 • choustonbey@nu.edu

The Master of Education in Secondary Education with Nevada Licensure is designed for students who are committed to being instructional leaders in the 7-12 setting. Courses for this degree meet the Nevada Department of Education requirements for an initial teaching license. They also meet requirements for a master's degree from National University that inter-relates theory and practice and promotes lifelong learning. The program is intended for students who want to obtain an initial teaching license and master's degree at the same time.

To receive a Master of Education in Secondary Education with Nevada Licensure, students must complete at least 57 quarter units of graduate work, 43.5 of which must be taken in residence at National University. Students enrolled in the joint degree-licensure program will not be awarded the master's degree until they complete all graduate and licensure coursework, including student teaching.

The student teaching courses are required for the initial teaching license. Students must have met subject matter competency prior to student teaching. Elementary and Secondary Education teacher candidates meet subject matter competence by passing the appropriate Praxis II examinations. Candidates must meet all state requirements for the Secondary Education Teaching License to apply to the Nevada Department of Education for licensure. An electronic portfolio is required for the assessment of all teacher licensure candidates. The purpose of the portfolio is for candidates to show how their work in teacher education is linked to their own competency in the Domains of Professional Competence. The portfolio must be reviewed and approved by a National University faculty member prior to exiting the licensure program.

#### **Program Requirements**

(12 courses; 57 quarter units)

| TED 615 | Foundations of Education                              |
|---------|---|
| TED 605 | The Diverse Classroom                                 |
| EXC 625 | Exceptional Children in the Classroom                 |
| TED 623 | Language Development Methodology for Secondary and    |
|         | Middle Schools  |
| TED 624 | Content Are Literacy for Secondary and Middle Schools |

Content Are Literacy for Secondary and Middle Schools **TED 625A** Curriculum Development for Secondary and Middle Schools

| TED 625B  | Instruction and Classroom Management for Secondary |
|---|--|
|   | and Middle Schools                                 |
| TED 640A  | Student Teaching I (6 quarter units)               |
| TED 640B  | Student Teaching II (6 quarter units)              |
| TED 649 Classroom Management & The Student Teaching |  |
|   | Seminar  |
| MAT 643   | Models of Teaching                                 |
| MAT 640   | Applications of Research for the Art of Teaching   |

#### **Course of Study**

National University's Professional Teacher Preparation program is structured around courses grouped into intra-related and interrelated family courses focused on themes of foundations, education methods and student teaching. Theory and practice as well as coursework and field experiences are developmental as candidates move from the foundation family courses to the method family courses and into student teaching. Candidates who successfully complete the Professional Teacher Preparation program are eligible for a teaching license; those who choose to earn a Master in Education degree must complete two additional courses.

#### **Foundation Courses**

The three foundation courses are considered the foundation course family because all the courses build upon each other in terms of conceptual knowledge and skill, field experiences, and assessments. Furthermore, two of the three courses share all three required textbooks so that teacher candidates can integrate foundational perspectives into an on-going and ever developing professional educator philosophical statement. The foundation course family is the theoretical basis for skill development and acquisition in the method courses. The courses that comprise this family are:

- TED 615 Foundations of Education
- TED 605 The Diverse Classroom.
- EXC 625 Exceptional Children in the Classroom

#### **Methods Courses**

As are the foundations courses, the pedagogy courses are formed around adult learning theory and fieldwork. So that each candidate gains a clear understanding of the realities of public education, the program's coursework and field experiences are interrelated to form a cohesive set of learning experiences. Teacher Performance Expectations (TPEs) inherent in the Domains of Professional Competence are highlighted throughout each course syllabus and course outline, and must be highlighted in each lesson plan developed by candidates so that each candidate will have extensive opportunities to learn and to teach.

| TED 623 | Language Development Methodology for Secondary and |
|---------|--|
|         | Middle Schools                                     |
|         |  |

- TED 624 Content Area Literacy for Secondary and Middle Schools TED 625A Curriculum Development for Secondary and Middle Schools
- TED 625B Instruction and Classroom Management for Secondary and Middle Schools

#### **Student Teaching**

| TED 649  | Classroom Management & The Student Teaching<br>Seminar |  |
|----------|--|--|
|          | Semmar   |  |
| TED 640A | Student Teaching I (6 quarter units)                   |  |
| TED 640B | Student Teaching II (6 quarter units)                  |  |
|          |  |  |

#### Master in Education

| MAT 643 | Models of Teaching                               |
|---------|--|
| MAT 640 | Applications of Research for the Art of Teaching |

#### **Nevada Licensing Programs**

Certain licensing programs may require enrollment into an electronic portfolio. Please see your faculty advisor for further information.

#### Admission Requirements

Students seeking a Nevada Teachers License at the graduate level at National University must possess a conferred or completed bachelor's degree, with a minimum 2.5 GPA from a regionally accredited U.S. university. Students with international degrees who do not hold a U.S.A. approved bachelor's degree must receive an evaluation from an approved international evaluation agency before being admitted to the University and starting the first course.

#### Admission Process

In addition to the admission requirements listed in the "General Admission Procedures" section of this catalog, applicants to all of National University's licensing programs must proceed through the following admissions procedure:

**Stage 1:** Students meet with an admission advisor and complete an admissions packet. Students who meet the listed criteria are admitted on a "provisional" basis with an estimated program of study.

Graduate students, see "Graduate Admission Standards."

**Stage 2:** All graduate level licensure students must attend a Faculty Advisement orientation seminar and complete a candidate statement within 30 days of starting their first course or pre-requisite course. The candidate statement must be reviewed and signed by the faculty advisor for admission to the School of Education.

**Stage 3:** Students must complete the licensure packet and return this to the faculty advisor within 30 days to avoid evaluation or scheduling errors. Candidates enrolled in both master's degree and licensure programs are evaluated after the licensure packet is returned to the faculty advisor.

Students are not eligible for financial aid until the evaluation is complete.

Students transferring from a teacher education program at another university must provide a letter of good standing. A maximum of 13.5 quarter units may be accepted for unit credit and/or course content.

Students who are absent for a period of 12 months or more must reenroll and reevaluate under a new catalog.

All licensing courses are valid for seven years.

## Student Assistance, Notice of Need to Improve, and Dismissal from School of Education Programs

National University is committed to maintaining quality standards throughout its licensure and masters programs and to graduating competent professional educators. National University identifies and assists students who need special assistance, and retains in its programs only those students who are suited for entry to or advancement in the education profession.

If a student is identified as being deficient or needing assistance to meet program standards at any point during his or her program, the student's instructor of record during coursework or University supervisor during a fieldwork assignment will issue the student a Professional growth and development plan form. The form will

indicate one of three possible actions that the instructor/supervisor intends to recommend to the lead faculty in the program:

1. The student is identified as needing improvement in designated areas. A plan of improvement, with an expected date of completion, is attached to the form. The student will be permitted to continue taking classes or continue in his/her fieldwork assignment while completing the plan.

2. The student is identified as needing improvement in designated areas. A plan of improvement, with an expected date of completion, is attached to the form. The student receives a failing grade in the class or an unsatisfactory grade in the fieldwork assignment. The student will not be permitted to continue taking classes or continue in his/her fieldwork assignment until the plan is completed and the class or fieldwork assignment is re-taken, at the student's expense.

3. The student is identified as being unsuited for the education profession and is recommended for dismissal from the program. Upon receiving a Professional growth and development plan form, the student will meet with his/her instructor of record or University supervisor, along with the regional lead faculty and/or the lead supervisor. This Faculty Assistance Team will discuss any recommended plan of improvement with the student and will later meet with the student to evaluate the student's performance of the expectations listed on the plan. If the candidate is allowed to continue in the program and receives a second unsatisfactory grade in a practicum or student teaching assignment, the student will be recommended for dismissal from the program. The process for a hearing and appeal, upon recommendation for dismissal from a program, is outlined in the Academic Dismissal Procedure under the Academic Information for Graduate Degrees section of this catalog.

#### **Program Advisement**

Every licensure program has an assigned Faculty Advisor who is available to provide program specific advisement related to a specific program field. The Faculty Advisor name and contact information is listed in the catalog under the heading of the specific program you enrolled in and these advisors are a resource for specific questions you may have about classes, curriculum and instructors.

#### **Student Teaching Requirements**

Applicable to all Elementary, Secondary, and Special Education Licensure Students:

Before beginning any part of student teaching, candidates must:

- Return the completed credentials packet within 30 days of admission and orientation
- Provide proof of passage of the Praxis I and II
- Demonstrate subject matter competency
- Provide verification of a negative tuberculin examination within four years of student teaching
- Interview with a School of Education faculty member
- Attend student teacher interview and orientation
- Complete the prerequisite coursework with a 3.0 GPA; "D" and "F" grades are not accepted
- Complete a minimum of 40.5 quarter units for elementary and 31.5 quarter units for secondary in residence.
- Have a zero account balance.
- See a faculty advisor or placement specialist for specific information regarding any of these requirements.

#### **Elementary and Secondary Student Teaching Placements**

Candidates are placed in their student teaching assignment by the University.

Detailed requirements for student teaching are listed in the Student Teaching Handbook for Elementary/Secondary and in the NU1 for Teacher Education

Note: Teacher Education Candidates may apply for equivalency (see form in Student Teaching Handbook) of one half of this requirement if they can document appropriate experience and meet other specified criteria.

Candidates will be placed:

- By the University in their student teaching school under the supervision of a University Supervisor and Cooperative Teacher(s).
- For at least one-half of their student teaching, in approved public, charter or private schools that implement state adopted core curriculum content standards within the state of Nevada. Summer school, after-school programs, and outdoor education programs will be reviewed to determine if they meet criteria for a student teaching assignment. Court schools or community alternative schools may be acceptable placements for one-half of the student teaching experience.
- Out-of-state courtesy placements in state-accredited schools outside Nevada may be considered if the candidate moves out of state. Prior approval must be given by the field experience coordinator in San Diego.
- In a supervised full-time student teaching assignment within the appropriate licensing area for 16 weeks.
- In two different teaching settings.
- In two different grade spans.
- Elementary Education Candidates will be placed:
- In classrooms to observe and participate at two or more of the following grade spans: K-2, 3-5, and 6-8. A K-2 class experience is required unless there is documented fieldwork experience with beginning readers.

Secondary Education Candidates will be placed:

- In two or more subject-specific teaching assignments that differ in content and/or grade level.
- In a teaching experience of a minimum of four academic periods a day in two classroom settings.

#### Licensure Candidates Teaching Under Contract

National University provides a program whereby actively employed teachers can complete the requirements for their teaching license while employed. All of the student teaching may be conducted in the candidate's classroom, assuming that the contract position is a match for the license sought. Licensure candidates teaching under contract:

- In an approved elementary education assignment can complete the assignment in their own classroom. There must be documented experience with K-2 or beginning readers, otherwise candidates must complete four weeks in an alternate setting with a certified teacher.
- In an approved secondary education assignment (within the license area) can complete the full semester in their own assignment provided that they are teaching four periods in two grade levels, or can document prior experience at other grade levels.
- In a regionally accredited and approved non-public school setting must complete a minimum of 4 weeks student teaching in a public school.
- Teach under the supervision of a University Supervisor and Cooperative Teacher who model effective teaching, implement state-adopted academic core curriculum, mentor the candidate, and work with the University Supervisor.

#### Application for a Nevada Teacher License

- Successful completion of the coursework with a minimum grade point average of 3.0 for graduate coursework. (Grades of "D" and "F" are not accepted.) All coursework must be completed within seven years to be accepted.
- Fulfillment of all financial obligations to the University before applying for the credential.
- Passing a portfolio review that covers the objectives of the particular program pursued. Contact your local faculty advisor for deadline and review dates.

#### Each candidate must have on file:

- A zero account balance
- Official transcripts from all colleges/universities attended
- Passing score in PRAXIS I
- Verification of subject matter competency with score reports or cards from PRAXIS II.
- Proof of passing with a grade of "C" or better coursework or an examination covering the U.S. Constitution, Nevada Constitution, and Nevada School Law.
- Written evaluations of performance in field experiences, internships, educational projects, student teaching and other practica

All candidates are expected to participate in the evaluation of programs including follow-up studies after being employed in the field.

## ■ MASTER OF SCIENCE WITH LICENSURE IN SPECIAL EDUCATION

#### Generalist in Special Education - Endorsement to Teach Students with Mild to Moderate Needs for Assistance and Intervention

(720-719-356)

Faculty Advisor: Jane Duckett • (858) 642-8346 • jduckett@nu.edu

The purpose of the Generalist in Special Education endorsement program is to prepare students to instruct learners with mild to moderate disabilities in the K-12 system.

The Generalist in Special Education endorsement program at National University is based on the premise that meeting the special instructional needs of students in today's schools requires knowledge of a wide array of teaching strategies, as no one strategy can meet the needs of every special needs student. Another major premise is that all prospective teachers must develop an awareness and acceptance of cultural, linguistic, ethnic, economic, gender, lifestyle, and ability differences. The program is designed to present a variety of research-validated methods, techniques, and opportunities to develop knowledge and skills to create and implement instructional programs that will positively impact the learning of K-12 students with special needs across developmental domains.

To receive a Master of Education in Secondary Education with Nevada Licensure, students must complete at least 58.5 quarter units of graduate work, 49.5 of which must be taken in residence at National University. Students enrolled in the joint degree-licensure program will not be awarded the master's degree until they complete all graduate and licensure coursework, including student teaching.

Candidates in the program must demonstrate mastery of methods and techniques that accommodate the increasing diversity in contemporary Special Education and General Education programs where students with special needs are served.

#### **Program Requirements**

(15 courses; 70.5 quarter units)

#### **Core Requirements**

(11 courses; 49.5 quarter units)

| EXC 625 | Exceptional Children in the Classroom                |
|---------|--|
| TED 611 | Educational Psychology                               |
| EXC 603 | Typical and Atypical Development in Children         |
| EXC 604 | Exceptionality and Diversity in the Classroom        |
| EXC 620 | Supporting Positive Behavior                         |
| EXC 630 | Assessment and Instructional Planning for Special    |
|         | Needs  |
| EXC 644 | Reading Methods for Special Education                |
| EXC 615 | Technology for the Disabled Person                   |
| EXC 650 | Consultation and Collaboration for Special Education |
| EXC 657 | Community, Resources, and Transition                 |
| EXC 660 | Instruction of Learners with Mild to Moderate        |

EXC 660 Instruction of Learners with Mild to Moderate Disabilities

#### **Student Teaching**

(2 courses; 12 quarter units)

EXC 686 A & B Student Teaching (9 weeks each)

#### **Project Courses**

(2 courses; 9 quarter units)

Students wishing to complete a Master's Degree in Special Education will need to complete two additional courses:

ILD 625 Educational Research and

EXC 694 Thesis (Prerequisites: ILD 625 and successful completion of an undergraduate or graduate statistics course. Students must have written permission of lead faculty to enroll in the course.) or

EXC 637 Action Research (Prerequisite: ILD 625)

#### Application for a Nevada Teacher License

- Successful completion of the coursework with a minimum grade point average of 3.0 for graduate coursework. (Grades of "D" and "F" are not accepted.) All coursework must be completed within seven years to be accepted.
- Fulfillment of all financial obligations to the University before applying for the credential.

#### Each candidate must have on file:

- A zero account balance
- Official transcripts from all colleges/universities attended
- Passing score in PRAXIS I
- Verification of subject matter competency with score reports or cards from PRAXIS II.
- Proof of passing with a grade of "C" or better coursework or an examination covering the U.S. Constitution, Nevada Constitution, and Nevada School Law.
- Written evaluations of performance in field experiences, internships, educational projects, student teaching and other practica

# **Division of**

# **Extended Learning**

Vice President, John Dooley M.B.A., Georgetown University

| Division of Extended Learning                    | 280 |
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The University of Values

## **Division of Extended Learning**

The Division of Extended Learning meets the needs of National University's diverse community of adult learners through a variety of innovative programs. The courses facilitate professional and organizational development, giving adults the opportunity to meet the ongoing challenges of changing careers. In addition, many of these programs are approved for continuing education units (CEUs) for various professional organizations.

The Continuing Education Unit (CEU) is a uniform measure of noncredit continuing education learning experience. One CEU is awarded for every 10 contact hours of participation. Employers and others who routinely examine and evaluate individual accomplishments generally accept this unit of measurement.

Extended Learning is an authorized provider of the Continuing Education Unit (CEU); benchmarked to International Association for Continuing Education and Training (IACET) standards. The IACET CEU is considered the hallmark of quality in continuing education and training. IACET CEUs enhance the credibility of professional development and training in disciplines, such as: education, engineering, accounting, legal, medical, Real Estate and others. National University provides many administrative services to support professional development events and conferences. These may be held at National University's campuses throughout California, client locations, online, or by real-time web seminars. Extended Learning documents CEUs with a certificate and/or an official National University transcript. For more information regarding professional excellence with NU CEUs, please call (858) 642-8607.

Extended Learning is a member of the following organizations:

The International Association for Continuing Education and Training (IACET) as an Authorized Provider of the Continuing Education Unit (CEU) The University Continuing Education Association (UCEA) The Association for Continuing Higher Education (ACHE) The Learning Resources Network (LERN)

National University, Division of Extended Learning 11255 North Torrey Pines Road, La Jolla, CA 92037 Phone: 1 (800) NAT-UNIV, ext. 8600

(858) 642-8600, Fax: (858) 642-8714 Web: www.nu.edu/el

### **Course Numbering System**

#### **Credit Courses**

Academic credit is granted for a limited number of programs. National University operates on a quarter system and all academic credit is awarded in quarter units. Students who plan to apply credits earned through Extended Learning to an academic degree program should consult with the appropriate institution and academic department to ascertain whether academic credits earned will transfer toward their proposed course of study. All courses to which academic credit is applied are 4.5 quarter units, unless otherwise specified, and follow National University's illustrated tuition rates for undergraduate and graduate courses. Extended Learning reserves the right to modify tuition and/or program rates at anytime.

#### **Course Levels and Numbers**

The course numbering system described below is effective only for those Extended Learning courses offered after 1991: 1000X-1099X Course for which lower division credit may be

|             | allowed toward degree requirements.               |
|-------------|---|
| 1100X-1199X | Course for which upper division credit is allowed |
|             | toward degree requirements.                       |
| 1200X-1299X | Course for which graduate credit may be allowed   |
|             | toward degree requirements.                       |

#### **Non-Credit Courses**

There are two categories of Extended Learning non-credit courses.

| 1800X-1899X | These courses offer Continuing Education Units<br>(CEUs), a nationally recognized measurement of a<br>non-credit learning experience. Professional groups,<br>employers, licensing agencies and others who<br>routinely evaluate individual accomplishments and<br>training generally accept this unit of measurement.<br>One CEU is awarded for every 10 hours of<br>participation. |
|-------------|--|
| 1900X-1999X | These courses carry neither academic credit nor CEUs.<br>They are offered in response to the growing need for<br>quality educational opportunities for professional,<br>career, personal growth or general cultural interest   |

# and knowledge. Grading System for Academic Courses

| Grade | Definition  |
|-------|-------------|
| А     | Exceptional |
| В     | Very Good   |
|       |             |

| D | very Good    |
|---|--------------|
| С | Satisfactory |
| D | Marginal     |

F Failing

#### **Grading System for Continuing Education Units**

Students are assessed on their comprehension of course material through class attendance, participation, weekly assignments, and instructor evaluation. In most cases, students will receive a grade of Satisfactory (S)/Unsatisfactory (U).

#### **Financial Aid**

Division of Extended Learning students are generally not eligible to receive federal financial aid, although alternative funding options are available. Students planning to enroll in non-credit courses may apply for an IT Skills Loan, Key Career Loan, or Sallie Mae Career Loan. These agencies are not affiliated with the Division of Extended Learning or National University. Additionally, the Division of Extended Learning provides guidance to students who are utilizing funds through Tuition Assistance, Veteran's Assistance, and /or the Workforce Investment Act. The Division of Extended Learning does work with students who are seeking financial aid for certificate programs that grant academic credit. Financial aid is available through two methods: National University Tuition Assistance Loan and Federal Financial Aid through Title IV.

#### Veterans' Information

Students wishing to apply for programs administered by the Department of Veterans Affairs can obtain information on how to apply for their benefits by calling or visiting the Veterans' Affairs Office located at 9388 Lightwave Avenue, San Diego, (858) 541-7970, or (800) 628-8648, ext. 7970.

#### Tuition

Tuition for Extended Learning courses varies per program. For current tuition rates please refer to the Extended Learning website: www.nu.edu/el; or call (858) 642-8600.

#### **Refund/Withdrawal Requests**

For courses that are at least a month long: students who drop a course prior to midnight of the ninth (9th) calendar day of the session will receive a 100 percent refund. Students who withdraw from a course on the tenth (10th) calendar day of the session will receive a 50 percent refund. Students who withdraw from a course after the tenth (10th) calendar day will receive no refund. In all cases in which refunds are awarded, the cost of books and materials will be deducted. Non-attendance or notifying an instructor does not constitute officially dropping or withdrawing from a course.

For courses that are less than a month long:

| Refund    | Percentage of Session/Course Remaining |
|-----------|--|
| 100%      | 75-100%                                |
| 50%       | 67-74%                                 |
| No Refund | 0-66%                                  |

#### **Corporate Training**

Corporate training is available for businesses or school districts through Extended Learning. Classes can be held at a place of business or at a National University learning center. Each program can be tailored to target an organization's unique challenges and inhouse training programs can be customized to any specifications necessary. Through these courses, National University can provide the services to maximize training budgets.

#### **Payment Options**

Payment can be made by either telephone, fax, or in person. Checks and any one of the following credit cards are accepted for your convenience: American Express, Discover, Visa, or MasterCard. Company invoicing is also available. Payment for Extended Learning courses is required before attending class.

## Certificate and Course Offerings

### **Certificate Programs**

### • Dropout Prevention Specialist Certificate Program

(811-200) Program Information: (858) 642-8600 • extlearning@nu.edu

#### **Program Structure**

This six-course certificate program prepares individuals to become a Dropout Prevention Specialist (DPS) and be an advocate in the lives of children in at risk situations. Individuals learn about successful strategies proven to help young students stay in school and improve the quality of our nation's student graduates. Early identification and intervention, creating and improving resiliency factors, and a nurturing school climate are among the strategies suggested for students at high risk of failure. A DPS will foster whole and emotionally healthy children who will score higher on exams, learn more, and enjoy school more. Completion of the six courses meets the California Department of Education's requirements for a DPS certificate. The certificate may qualify for continuing education units in California and other states.

#### **Course Delivery Mode**

Classes are designed to be synchronous. Students will participate remotely with real-time Voice Over Internet Protocol iLinc Technology. Broadband access is mandatory. The certificate program consists of the following six courses: (6 courses; 7.2 CEUs)

| DPX 1810X | Introduction to Dropout Prevention             |
|-----------|--|
| DPX 1820X | Student Success Team (SST): The Real Secret of |
|           | Prevention                                     |
| DPX 1830X | Assessment and Accountability                  |
| DPX 1840X | Using School and Community Resources to Foster |
|           | Student Resiliency                             |
| DPX 1850X | Communication, Coordination of Services,       |
|           | Collaboratives, and School and Community       |
|           | Involvement                                    |
| DPX 1860X | Relevant Issues in Dropout Prevention          |

#### Autism Education Certificate Program

#### (811-202)

Faculty Advisor: KayDee Caywood • (310) 662-2145 • kcaywood@nu.edu

Courses can be taken for academic credit or continuing education units (CEUs).

This program is offered in cohorts only

#### Program Structure

This certificate is designed for those interested in finding out more about working with and teaching those that fall within the Autism Spectrum Disorder. The four course sequence is designed to provide the student with an orientation to the terms and the characteristics involved, assessment and behavior management interaction strategies, a variety of teaching strategies, and train necessary skills in collaborating with parents and families of those in the spectrum. It is recommended that students complete Introduction to Students with Autism Spectrum Disorders first in the sequence.

Graduate credit courses can be applied to the Masters of Arts in Teaching.

The four courses are designated by the following course numbers, depending on whether you are taking the program for graduate academic units (1200X) or CEU (1800X):

The certificate program consists of the following four courses: (4 courses; 18 quarter units) (4 courses; 16 CEUs)

| AEX 1201X/1801X | Introduction to Students with Autism       |
|-----------------|--|
|                 | Spectrum Disorders (ASD)                   |
| AEX 1202X/1802X | Assessment and Behavioral Applications in  |
|                 | Autism                                     |
| AEX 1203X/1803X | Evidenced-Based Intervention / Instruction |
|                 | for Students with Autism                   |
| AEX 1204X/1804X | Autism: Collaboration with Parents and     |
|                 | Families                                   |

#### Enterprise Excellence Certificate Programs

Program Information: (858) 642-8600 • extlearning@nu.edu

#### • Six Sigma Green Belt and Black Belt Certifications

#### **Certification Prerequisites**

Candidates for the certificate program must possess a Bachelor's degree in engineering, engineering technology, or physical sciences, or a closely related area from an accredited university. Interested students from other disciplines may be admitted to the program

but may be required to complete additional courses. Those who have a general non-science and non-engineering degree would be considered for admission based on relevant experience and the following minimum program prerequisites:

| MGT 409 C | Principles of Management and Organization (or       |
|-----------|---|
|           | equivalent course)                                  |
| MNS 205   | Introduction to Quantitative Methods and Statistics |
|           | (or equivalent course)                              |

These courses may be waived if their equivalents have been completed at the undergraduate level with a grade of "C" or better.

The specialization courses as listed below will be offered in conjunction with the Management Sciences Division of VSE Corporation and National University. Successful completion of all four courses (EEX 1201X, EEX 1202X, EEX 1203X, and EEX 1204X) is required as part of the Lean Six Sigma specialization in the in the Master of Science in Engineering Management degree offered online through the School of Engineering and Technology. For information on degree requirements refer to the School of Engineering and Technology section of this catalog.

The courses include:

#### **Green Belt Program Courses**

| EEX 1201X | Fundamentals of Process Analysis and Optimization |
|-----------|---|
| EEX 1202X | Operational Efficiency and Cost Effectiveness     |

#### **Black Belt Program Courses**

| EEX 1203X | Fundamentals of Leading and Managing Continuous |
|-----------|---|
|           | Measurable Improvement                          |
| EEX 1204X | Advanced Topics in Process Analysis             |

#### Green Belt and Black Belt Certification Course

EEX 1205X Six Sigma Project Practicum

The combined Green Belt and Black Belt program courses are equivalent to 160 hours of instruction. EEX 1205X is required only to obtain the Black Belt and Green Belt certifications in conjunction with the Green Belt and Black Belt program courses.

## Lean Six Sigma Master Black Belt Certification (811-300)

| EEX 1820X | Lean Six Sigma Master Black Belt: Part 1 |
|-----------|--|
| EEX 1821X | Lean Six Sigma Master Black Belt: Part 2 |

This course prepares Lean Six Sigma Black Belts to become Lean Six Sigma Master Black Belts and to serve as a member of the leadership team of an organization to achieve Enterprise Excellence. Prior to attending this workshop candidates need to be certified Lean Six Sigma Black Belts for a minimum of 12 months and to have successfully completed the equivalent of the following workshops:

- Project Management
- Probability and Statistics for Scientists and Engineers
- Introduction to Reliability Engineering

Lean Six Sigma Master Black Belt candidates will be nominated for certification after successfully completing this workshop; demonstrating successfully completing a minimum of three Lean Six Sigma Black Belt projects in diverse environments; mentoring and coaching a minimum of five Lean Six Sigma Black Belt and/or Green Belt candidates to certification; and demonstrating an ability to perform Lean Six Sigma Green Belt and Black Belt training.

### **Enterprise Architecture Certificate Program**

Program Information: (858) 642-8600 • extlearning@nu.edu

#### **Program Structure**

The Federal Government requires Enterprise Architecture certifications in Federal Enterprise Architecture Framework (FEAF) and/or Department of Defense Architecture Framework (DoDAF). National University in conjunction with the Federal Enterprise Architecture Certification (FEAC) Institute provides training and education leading to certification in DoDAF and FEAF. National University offers students the opportunity to earn either continuing education units (CEU) or graduate academic credit. Students who take the classes for graduate credit can apply the units to the Master of Science in Engineering Management degree offered online through the School of Engineering and Technology. For information on degree requirements refer to the School of Engineering and Technology section of this catalog.

The DoDAF program offers experience with the products for the integrated architecture views including:

- Global Information Grid
- Network Centric Warfare
- · Levels of Information Systems Interoperability
- Core Architecture Data Model

The FEA(F) program addresses:

- Concepts: regulations, concepts, theories, principles, methodology, and views
- Planning: creating Enterprise Architecture understanding & awareness
- Implementation: internal implementation, marketing, selling, and managing change
- Integration of: business, data, application, and technology
- Practicum: Project Development and Presentation, Program Certification Exam

## Department of Defense Architecture Framework (DODAF) Certification Program

#### (811-301)

Graduate credit: (4 courses; 18 quarter units; 1 course; 4 CEUs) CEUs: (5 courses; 20 CEUs)

The five courses are designated by the following course numbers, depending on whether you are taking the program for graduate academic units (1200X) or CEU (1800X):

| DFX 1201X/1801X | Architecture Framework Basics                |
|-----------------|--|
| DFX 1202X/1802X | Core and Supporting Products                 |
|                 | Enterprise Architecture Planning             |
| DFX 1204X/1804X | Advanced Architecture Modeling and Analysis  |
| DFX 1810X       | Enterprise Architecture Practicum and Thesis |
|                 | (CEUs only)                                  |

#### • Federal Enterprise Architecture (Framework) [FEA(F)] Certification Program

#### (811-302)

Graduate credit: (4 courses; 18 quarter units; 1 course; 4 CEUs) CEUs: (5 courses; 20 CEUs)

The five courses are designated by the following course numbers, depending on whether you are taking the program for graduate academic units (1200X) or CEU (1800X):

EAX 1201X/1801X Enterprise Architecture Concepts and Theory EAX 1202X/1802X Enterprise Architecture Planning

EAX 1203X/1803X Enterprise Architecture Implementation EAX 1204X/1804X Enterprise Architecture Integration EAX 1810X Enterprise Architecture Practicum and Thesis (CEUs only)

### **Courses for Educators**

These courses provide both current and future educators with the opportunity to excel in the classroom. Coursework includes test preparation, credential-required classes, as well as CD ROM courses designed to help teachers meet their requirements for professional development.

#### **Extended Learning Academic Courses:**

| HEDX 1201X | Health Education for Teachers (4.5 quarter units)<br>(This courses satisfies the CCTC health education<br>requirements for a Professional Clear under the Ryan<br>Credential and the Preliminary SB2042 Credential. |
|------------|---|
|            | This course does not grant graduate credit and cannot   |
|            | be used as an elective in a graduate program. This  |
|            | course may not be used in place of HED 602 in   |
|            | graduate programs under the School of Education.)   |
| EDX 1201X  | Computer Based Technology in the Classroom (4.5   |
|            | quarter units)  |
| EDX 1229X  | Education Leadership in Charter Schools Today   |
| IHD 1203X  | Facilitating Outcomes: Language, Learning, Speech   |
|            | and Listening   |

#### National Board Certification Teacher (NBCT) Academy & Monthly Collaborative Sessions w/ Online Supplements Faculty Advisor: Ronarae Adams • (858) 642-8352 • radams@nu.edu

NBCX 1201X/1800X National Board Certification Academy

National University offers three support options to meet the needs of teachers seeking National Board Certification. All options result in 20 contact hours plus an additional 25 hours of required field work for a total of 45 hours.

Upon completion of the NBCT Academy, participants receive:

- Certificate of Completion
- Official NU transcript
- Ongoing support from Certified Support Providers (CSPs)
   trained by NBPTS
- Advanced Candidacy and/or Recertification Assistance

There may be some price flexibility for the graduate program when a group of students enroll as a cohort and as a part of earning a master's degree. National University may also bring this course to a school district anywhere in the United States. For information about customized schedules, the possibility of cohort discount and technical questions, please contact the Program Director: Ronarae Adams; radams@nu.edu.

#### OPTION A: NBCX 1201X (NBCX 1801X INCLUDED)

4.5 Graduate Quarter Units

The NBCT Academy is designed specifically for credentialed teachers who are seeking National Board Certification. With approval from the Program Director, NBCX 1201X may be substituted for NBC 680 for pre or active candidates in the Master of Arts in Teaching degree program.

When enrolling in NBCX 1201X, a one month introduction course, teachers are provided with access to NBCX 1801X at no additional charge. This monthly national online collaborative is offered through the Division of Extended Learning. NBCX 1801X will be shown on an Extended Learning transcript that is separate from the academic transcript.

#### OPTION B: NBCX 1800X (NBCX 1801X INCLUDED)

4.5 Continuing Education Units (CEUs)

Teachers may enroll in the NBCT Academy for CEU credit. Although CEUs cannot be converted to graduate credit, teachers are provided with an identical introduction course as the NBCX 1201X course; but without a letter grade (satisfactory/unsatisfactory). Teachers can use CEUs for salary and career advancement.

This option also includes monthly national online Collaborative sessions (NBCX 1801X) at no additional charge.

#### **OPTION C: NBCX 1801X COLLABORATIVE SESSIONS**

Students enrolled in NBCX 1201X or NBCX 1800X are automatically enrolled in these collaborative online sessions at no additional charge. The monthly online collaborative provides teachers with an opportunity to network, and analyze their practice and portfolio commentaries against the certificate standards in a group setting. Sessions are held one Saturday each month from 9:00 am until Noon at various NU network sites and in a protected online collaborative environment. These sessions begin with a topic, but are structured to allow time for reading, editing and feedback to and from peers in a supportive environment moderated by NBCT Certified Support Providers (CSPs).

Those who enroll only in NBCX 1801X may not be taking the NBCT Academy courses, yet simply want to interact with other active candidates from across the country, and want additional exposure to the overall preparation methodologies.

The cost effective collaborative sessions provide NBCT candidates with a flexible, yet comprehensive approach for support, collaboration and technical assistance. This year-long collaborative augments other NBCT preparation methods by providing access to resources, threaded discussions and synchronous chat sessions. The online collaborative is hosted, but not driven, by experienced NBCTs with support provider training (NBPTS).

Each year, the collaborative reconvenes with updated information in the online supplement. As early as June, NBCT candidates will be admitted to the collaborative and may begin accessing helpful information. Enrolled candidates will have access to online chats, threaded discussions and online information that parallels monthly "on ground" research meetings.

All support and assistance is carefully designed and aligned with the NBPTS Code of Ethics for Candidates Support, and all participants (candidates and CSPs) adhere to the NBPTS criteria which are reflected by all program participants.

#### **Test Preparation Courses**

Program Information: (858) 642-8600 • extlearning@nu.edu

(The following courses do not grant credit)

| EDX 1915X | California Subject Examination for Teachers (CSET)          |
|-----------|---|
|           | Single Subject Math Subtest I: Algebra and Number           |
|           | Theory Preparatory Course                                   |
| EDX 1916X | California Subject Examination for Teachers (CSET)          |
|           | Circula Cashingt Math Cashtant II. Commenters Dechabilities |

|           | Single Subject Math Subtest II: Geometry, Probability |
|-----------|---|
|           | and Statistics Preparatory Course                     |
| EDX 1920X | California Subject Examination for Teachers (CSET)    |

- Multiple Subject Preparatory Course Subtests I III
- EDX 1921X California Subject Examination for Teachers (CSET) Multiple Subject: Test Taking Skills

| EDX 1922X | California Subject Examination for Teachers (CSET)     |
|-----------|--|
|           | Multiple Subject Subtest I: History/Social Science and |
|           | Reading, Language, and Literature                      |
| EDX 1923X | California Subject Examination for Teachers (CSET)     |
|           | Multiple Subject Subtest II: Science and Math          |
| EDX 1924X | California Subject Examination for Teachers (CSET)     |
|           | Multiple Subject Subtest III: Visual and Performing    |
|           | Arts, Physical Education and Human Development         |
| EDX 1938X | U.S. Constitution Preparatory Course and               |
|           | Examination  |
| EDX 1940X | Reading Instruction Competence Assessment (RICA)       |
|           | Preparatory Course                                     |
|           |  |

### **Courses for Teachers**

Program Information: (858) 642-8600 • extlearning@nu.edu

| EDX 1842X | Vocational Education Level I: The Instructional         |
|-----------|---|
|           | Process in Vocational Education and Techniques of       |
|           | Teaching; 9 CEUs  |
| EDX 1843X | Vocational Education Level II: Principles and Practices |
|           | of Vocational Education; 9 CEUs                         |

#### Self-Paced CD-ROMs

Program Information: (858) 642-8600 • extlearning@nu.edu

Self-paced CD ROM courses designed to satisfy teacher CEU\* requirements for career advancement.

| TEDX 1823X  | Attention Deficit Disorder: Information and           |  |
|---|---|--|
| 120/ 1020/  | Interventions for Effective Teaching; 4 CEUs          |  |
| TEDX 1824X  | Advanced Classroom Management: Children as            |  |
| 120/110201  | Change Agents; 3 CEUs                                 |  |
| TEDX 1825X  | Educational Assessment: Assessing Student Learning    |  |
|   | in the Classroom; 3 CEUs                              |  |
| TEDX 1826X  | Traumatized Child: The Effects of Stress, Trauma, and |  |
|   | Violence on Student Learning; 3 CEUs                  |  |
| TEDX 1827X  | Teaching Diversity: Influences and Issues in the      |  |
|   | Classroom; 3 CEUs                                     |  |
| TEDX 1844X  | Behavior is Language: Strategies for Managing         |  |
|   | Disruptive Behavior; 4 CEUs                           |  |
| TEDX 1845X  | Violence in Schools; 3 CEUs                           |  |
| TEDX 1846X  | Learning Disabilities: Practical Information for      |  |
|   | Classroom Teachers; 4 CEUs                            |  |
| TEDX 1848X  | Drugs & Alcohol in School: Understanding Substance    |  |
|   | Use & Abuse; 3 CEUs                                   |  |
| TEDX 1849X  | Autism and Asperger's Disorders; 3 CEUs               |  |
| TEDX 1851X  | Functional Analysis: Introduction to Completing       |  |
|   | Behavior Assessments; 3 CEUs                          |  |
| TEDX 1868X  | Inclusion: Working with Special Needs Students in     |  |
|   | Mainstream Classrooms; 3 CEUs                         |  |
| TEDX 1871X  | Understanding Aggression: Coping with Aggressive      |  |
|   | Behavior in the Classroom; 4 CEUs                     |  |
| TEDX 1872X  | Talented & Gifted Education: Working with High        |  |
|   | Achievers; 3 CEUs                                     |  |
| TEDX 1879X  | Child Abuse: Working with the Abused & Neglected;     |  |
|   | 3 CEUs  |  |
| *Units cannot be applied toward an academic degree program. |   |  |

### **Child Care Providers Training Workshop**

Faculty Advisor: Deborah LeBlanc • (310) 662-2146 • dleblanc@nu.edu

Courses designed for child care providers to maintain licensure requirements with the Center for Community and Family Services (CCFS) in Carson, CA. Courses are offered in English at CCFS and Spanish at the National University Los Angeles campus. Students receive 2.4 CEUs and a certificate of completion from National University.

| CCTX 1801X | Arts and Crafts for Child Care                       |
|------------|--|
| CCTX 1802X | Child Care Curriculum Planning for Desired Results   |
| CCTX 1803X | Cultural Diversity & Global Awareness for Child Care |
|            | Professionals  |
| CCTX 1810X | Beginner's Course – Child Care Providers Training    |
|            | Course   |
| CCTX 1811X | Curso Para Principiantes – Curso de Entrenamiento    |
|            | Para Proveedores de Cuidado Infantil                 |
| CCTX 1820X | Advanced Course – School Readiness and Preparation   |
|            | Course   |
| CCTX 1821X | Curso Avanzado – Padres y Hijos Comunidad            |
|            | Observación y Concientización                        |

### **Paralegal Studies**

Director: Marlene Amera Alhandy • (310) 662-2115, (310) 662-2115 • malhandy@nu.edu

#### • Legal Assistant Certificate

(672-000-521)

#### **Program Description**

This program option consists of 17 courses (76.5); 16 of which are Legal Specialty courses and one course of English for Professional. 27 quarter units of general education are required (see catalog for information on general education). All lower division general education courses must be completed at National University or another regionally accredited institution.

The course work and the accompanying credits in this program may be transferred to the Bachelor of Science in Paralegal Studies, if all other requirements for admission are met.

#### **Certificate Requirements**

(17 courses; 76.5 quarter units)

#### **Requirements for Core Courses**

(10 courses; 45 quarter units)

| PLA 301 | Legal Theory and Ethics         |
|---------|---------------------------------|
| PLA 303 | Law Office Administration       |
| PLA 305 | Property                        |
| PLA 306 | Torts                           |
| PLA 308 | Contracts                       |
| PLA 309 | Directed Research and Writing A |
| PLA 310 | Directed Research and Writing B |
| PLA 318 | Remedies and Judgments          |
| PLA 324 | English for Professionals       |
| PLA 425 | Litigation I                    |

#### **Requirements for Specialty Concentrations**

(4 courses; 18 quarter units)

(3 courses; 13.5 quarter units, for students choosing Litigation)

All students must select two specialty concentrations listed below. Students must take the level I and level II courses for each Specialization. Since Litigation I is a requirement of the core courses, students who select the Litigation Specialization will be required to take one additional elective.

| PLA 407 | Family Law I                   |
|---------|--------------------------------|
| PLA 421 | Family Law II                  |
| PLA 426 | Litigation II                  |
| PLA 427 | Probate and Estate Planning I  |
| PLA 428 | Probate and Estate Planning II |
| PLA 429 | Corporations I                 |
| PLA 430 | Corporations II                |
| PLA 431 | Real Estate I                  |

- PLA 432 Real Estate II
- PLA 433 Criminal Law I
- PLA 434 Criminal Law II

#### **Requirements for Elective Courses**

(3 courses; 13.5 quarter units) (4 courses; 18 quarter units, for students who choose the Litigation concentration)

| PLA 302 | Computers and the Law            |
|---------|----------------------------------|
| PLA 311 | Internship                       |
| PLA 314 | Workers' Compensation            |
| PLA 315 | Bankruptcy Law and Procedure     |
| PLA 316 | Entertainment Law                |
| PLA 317 | Immigration Practice             |
| PLA 335 | Employment Law                   |
| PLA 404 | Wills, Trusts, & Estate Planning |
| PLA 407 | Family Law I                     |
| PLA 413 | Juvenile Law and Procedure       |
| PLA 433 | Criminal Law I                   |
| PLA 434 | Criminal Law II                  |
|         |                                  |

### Paralegal Specialist Certificate

(672-000)

#### **Program Description**

This program option consists of nine courses (40.5 quarter units); all of which are Legal Specialty courses except one course of English for Professionals is required in five of six Paralegal Specialist Certificate program options. A minimum of 90 quarter units of general education and electives are required in each program option below. All lower division general education courses must be completed at National University or another regionally accredited institution.

Upon successful completion of the program, students earn the Paralegal Specialist Certificate in one of the following six areas:

Litigation Corporations Real Estate

Probate and Estate Planning

- Criminal Law
- Family Law

Students may earn more than one Paralegal Specialist Certificate. Generally, any course completed for any one Paralegal Specialist Certificate need not be repeated and will apply towards other Paralegal Specialist Certificates.

Each certificate is tailored to include training in substantive legal analysis, drafting of relevant legal documents, and managing of procedural matters. Each specialization requires the completion of 40.5 quarter units.

### ▲ Litigation Specialization

(672-000-515)

This certificate covers case analysis, legal research, drafting of pleadings, motion and discovery documents, evidence law, and preparation of civil cases for trial.

#### Certificate Requirements

(9 courses; 40.5 quarter units)

| PLA 301 | Legal Theory and Ethics   |
|---------|---------------------------|
| PLA 303 | Law Office Administration |
| PLA 306 | Torts                     |
| PLA 308 | Contracts                 |

| PLA 309 | Directed Research & Writing A |
|---------|-------------------------------|
| PLA 318 | Remedies and Judgments        |
| PLA 324 | English for Professionals     |
| PLA 425 | Litigation I                  |
| PLA 426 | Litigation II                 |

### Corporations Specialization

(672-000-516)

This certificate covers case analysis, legal research, and preparation of documents for the formation and management of the corporate entity, including regulation of securities, acquisitions, and mergers.

#### **Certificate Requirements**

(9 courses; 40.5 quarter units)

| PLA 301 | Legal Theory and Ethics       |
|---------|-------------------------------|
| PLA 303 | Law Office Administration     |
| PLA 305 | Property                      |
| PLA 308 | Contracts                     |
| PLA 309 | Directed Research & Writing A |
| PLA 318 | Remedies and Judgments        |
| PLA 324 | English for Professionals     |
| PLA 429 | Corporations I                |
| PLA 430 | Corporations II               |

### Real Estate Law Specialization

(672-000-517)

This certificate covers case analysis, legal research, analysis and preparation of documents involving leases, sale of property, real estate syndications, condominiums, zoning, and other related matters.

#### **Certificate Requirements**

(9 courses; 40.5 quarter units)

| Legal Theory and Ethics       |
|-------------------------------|
| Law Office Administration     |
| Property                      |
| Contracts                     |
| Directed Research & Writing A |
| Remedies and Judgments        |
| English for Professionals     |
| Real Estate I                 |
| Real Estate II                |
|                               |

### Probate and Estate Planning Specialization

(672-000-518)

This certificate covers case analysis, legal research, preparation of documents, including wills and trusts, and handling administration of decedent's estate, including tax matters.

#### **Certificate Requirements**

(9 courses; 40.5 quarter units)

| PLA 301 | Legal Theory and Ethics            |
|---------|------------------------------------|
| PLA 303 | Law Office Administration          |
| PLA 305 | Property                           |
| PLA 309 | Directed Research & Writing A      |
| PLA 324 | English for Professionals          |
| PLA 404 | Wills, Trusts, and Estate Planning |
| PLA 407 | Family Law I                       |
| PLA 427 | Probate and Estate Planning I      |
| PLA 428 | Probate and Estate Planning II     |

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### ▲ Criminal Law Specialization

(672-000-519)

This certificate covers the prosecution of criminal defendants and their defense, whether in public or private practice.

#### **Certificate Requirements**

(9 courses; 40.5 quarter units)

| PLA 301<br>PLA 306<br>PLA 309<br>PLA 310<br>PLA 324<br>PLA 407<br>PLA 413<br>PLA 433 | Legal Theory and Ethics<br>Torts<br>Directed Research & Writing A<br>Directed Research & Writing B<br>English for Professionals<br>Family Law I<br>Juvenile Law and Procedure<br>Criminal Law I |
|--|---|
| PLA 433  | Criminal Law II   |
|  |   |

### ▲ Family Law Specialization

(672-000-520)

This certificate covers case analysis, legal research, analysis, and preparation of family law pleadings involving dissolution of marriage, paternity actions, domestic violence actions, adoptions, and other related matters.

#### **Certificate Requirements**

(9 courses; 40.5 quarter units)

| PLA 301<br>PLA 303<br>PLA 305<br>PLA 309<br>PLA 404<br>PLA 407<br>PLA 413<br>PLA 421<br>PLA 421 | Legal Theory and Ethics<br>Law Office Administration<br>Property<br>Directed Research & Writing A<br>Wills, Trusts, and Estate Planning<br>Family Law I<br>Juvenile Law and Procedure<br>Family Law I<br>Litization L |
|---|---|
| PLA 425   | Litigation I  |
|   |   |

### **Online Paraprofessional Programs**

Program Information: (858) 642-8600 • extlearning@nu.edu

Extended Learning in partnership with Gatlin Education offers online career training courses that are designed to provide the workforce skills necessary to acquire professional caliber positions for many in-demand occupations. Choose from programs in the Computer-Internet, Business, and Technical industries. All programs are designed to provide the most effective Web-based learning experience. Registration is open enrollment and includes everything students need, including textbooks and trained instructors. Students have 180 days to complete the coursework. Students receive a certificate of completion from National University.

| Medical Transcription                              |
|--|
| HIPAA Compliance (4 user licenses)                 |
| Microsoft Certified System Engineer 2003 (MCSE)    |
| Microsoft Certified System Administrator 2003      |
| (MCSA)   |
| Microsoft Certified System Administrator Plus 2003 |
| (MCSA+)  |
| Microsoft Certified Database Administrator (MCDBA) |
| Linux+/LPI Level One Certification Training        |
| Cisco <sup>™</sup> CCNA® Certification Training    |
| Microsoft Office Specialist (MOS)                  |
| Security+ Certification Training                   |
| Network+/Server+ Certification Training            |
|  |

| HSX 1913X   | Graphic Design  |
|---|---|
| HSX 1914X   | AutoCAD 2007  |
| HSX 1915X   | Help Desk Specialist  |
| HSX 1917X   | Records Management  |
| HSX 1917X   | eBusiness   |
| HSX 1920X   | Web Database Developer  |
| HSX 1920X   | Search Engine Marketing   |
| HSX 1922X   | Pay Per Click Marketing   |
| HSX 1923X   | Search Engine Optimization  |
| HSX 1924X   | Wedding Planner   |
| HSX 1925X   | HVAC Technician   |
| HSX 1926X   | Veterinary Assistant  |
| HSX 1927X   | Administrative Dental Assistant   |
| HSX 1928X<br>HSX 1930X<br>HSX 1931X<br>HSX 1932X<br>HSX 1933X<br>HSX 1934X<br>HSX 1925X | Home Inspection Certificate<br>Bookkeeping the Easy Way<br>Certified Bookkeeper<br>CompTIA A+ Certification<br>Project Management Professional<br>Revenue Cycle Management for Healthcare Providers |
| HSX 1935X   | Six Sigma Greenbelt   |
| HSX 1936X   | Travel Agent Certification Preparation  |
| HSX 1937X   | Webmaster Certification   |

### **Online Personal Enrichment**

Program Information: (858) 642-8600 • extlearning@nu.edu

The personal enrichment programs offer six-week online courses for adults. Each course comes equipped with an instructor, lively discussions with your fellow students, and plenty of practical information that you can put to immediate use. A new section of each course starts monthly.

| ETG 1901X | Creating a Successful Business Plan                     |
|-----------|---|
| ETG 1952X | Fundamentals of Technical Writing                       |
| ETG 1953X | The Keys to Effective Editing                           |
| ETG 1956X | The Craft of Magazine Writing                           |
| ETG 1957X | Writeriffic Creativity Training for Writers             |
| ETG 1959X | Travel Writing  |
| ETG 1963X | Discover Digital Photography                            |
| ETG 1969X | Stocks, Bonds & Investing                               |
| ETG 1972X | Starting a Consulting Practice                          |
| ETG 1973X | Start and Operate your own Home-Based Business          |
| ETG 1977X | Effective Business Writing                              |
| ETG 1978X | Business and Marketing Writing                          |
| ETG 1981X | Introduction to Excel                                   |
| ETG 1982X | Medical Terminology: A Word Association Approach        |
| ETG 1983X | Creating Web Pages II                                   |
| ETG 1984X | Introduction to Flash 8                                 |
| ETG 1985X | Achieving Top Search Engine Positions                   |
| ETG 1986X | Introduction to QuickBooks 2007                         |
| ETG 1987X | Introduction to Photoshop CS2                           |
| ETG 1988X | Intermediate Photoshop CS2                              |
| ETG 1989X | Introduction to Microsoft Access 2003                   |
| ETG 1990X | Writing for Children                                    |
| ETG 1991X | Writeriffic 2: Advanced Creativity Training for Writers |
| ETG 1992X | Your Screenwriting Career                               |
| ETG 1993X | Becoming a Grant Writing Consultant                     |
| ETG 1994X | Get Paid to Travel                                      |
| ETG 1995X | Writing Effective Grant Proposals                       |
| ETG 1996X | Marketing Your Business on the Internet                 |
| ETG 1997X | Accounting Fundamentals                                 |
| ETG 1998X | Real Estate Investing                                   |

### National University Community Research Institute

Director: Thomas MacCalla • (858) 642-8104 • tmaccalla@nu.edu

The National University Community Research Institute (NUCRI) is an outgrowth of the 1997 President's Commission on Community. A major outcome of the commission was to envision the University's collaborative future as a full community partner. Community became an institutional core value and NUCRI developed into a university-wide, point of contact for making the university-community connection across disciplines and facilitating community research and technology applications for smart and creative community building.

The academically-oriented and practitioner-based Institute focuses on community research and technology, knowledge sharing, professional development, educational outreach and service. Through its University Consultant Corps of faculty, students, and community practitioners NUCRI engages in collaborative research and innovative technology transfer initiatives with strategic alliances to pursue its mission. The overarching goal is to enhance community capacity building and involvement for sustainable community development.

NUCRI in collaboration with Extended Learning offers:

| PDX 1800X | Entrepreneurship as a Life Skill |
|-----------|----------------------------------|
| PDX 1803X | GLOBE Science Education Workshop |
| PDX 1805X | Music and Culture Connection     |

### Extended Learning Course Descriptions

#### AEX 1201X / 1801X

#### Introduction to Students with Autism Spectrum Disorders (ASD)

This course introduces the history and terms that explain the parameters of teaching students with the ASD classification. A review of the law and rights of parents as well as issues regarding service and specialized programs are included. Using clinical and research-based exploration, the student will develop an understanding of what is needed to provide a successful teaching environment for students that fall within the spectrum.

#### AEX 1202X / 1802X

### Assessment and Behavioral Applications in Autism (2 months)

This course focuses on the empirical bases for the assessment and treatment of autism. The research literature supporting the efficacy of behaviorally based (Applied Behavior Analysis, ABA) approaches in the treatment of autism is unequivocal. This course will provide the student with an overview of the ABA approach to treating autism, and how ABA fits within an overall treatment paradigm for autism. The involvement of schools, agencies, and various professionals will be covered.

#### AEX 1203X / 1803X

**Evidenced-Based Intervention / Instruction for Students with Autism** The course is designed to provide the student with relevant strategies/ instructional methods that are appropriate for young children (Pre-K – 5) with emphasis on development of Communication Skills, and older children (Grades 6-12) that include strategies on inclusion with general education standards as well as those that include Life Skills curriculum. All intervention strategies are taught according to their ultimate success in a fullinclusive environment. Assignments will contribute to a multiple portfolio piece (for the Autism Certificate portfolio) that students can refer back to when working with individualized programs for students with ASD.

#### AEX 1204X / 1804X

#### Autism: Collaboration with Parents and Families

This course assists educators, therapists and program administrators build supportive relationships with families as a foundation for designing appropriate learning experiences for their child with autism. Using clinical and research-based feedback from parents of children with autism the student will develop the knowledge and skills for communicating accurately and sensitively, assist in the selecting and evaluating intervention services and helping families manage short-term and long-terms issues.

#### CCTX 1801X

#### Arts and Crafts for Child Care

This course is designed to teach a variety of creative arts and crafts concepts and techniques for ensuring that your early childhood curriculum remains fresh and exciting, while fostering productive learning and personal development. Attendance is mandatory for all sessions.

#### CCTX 1802X

#### Child Care Curriculum Planning for Desired Results

This course is designed to review child care theory and development useful in designing and planning early childhood curriculum to enhance desired results in learning. The course includes lesson planning and classroom management techniques useful in a variety of learning environments. Attendance is mandatory for all sessions.

#### CCTX 1803X

#### Cultural Diversity & Global Awareness for Child Care Professionals

This course is designed to address cultural diversity and global awareness approaches useful in teaching young children and improving staff and parent relationships. The course will include culturally diverse lesson planning and classroom activities useful in a variety of learning environments. Attendance is mandatory for all sessions.

#### ССТХ 1810Х

#### Beginner's Course - Child Care Providers Training Course

This course is designed to acquaint students with child development theories and principles, as well as school readiness training for providers caring for children aged zero to six years old. This course is designed to increase students' understanding of the various physical, social, cognitive, and emotional development tasks peculiar to each state of human development.

#### CCTX 1811X

Curso Para Principiantes – Curso de Entrenamiento Para Proveedores de Cuidado Infantil

#### ССТХ 1820Х

### Advanced Course – School Readiness and Preparation Course

This course is designed to provide information on improving child/parent/community relationships through active participation in pupil's life. Parent communication and conflict management skills will be addressed. Course is designed to continue focus on enhancing providers' knowledge of school readiness skills and techniques for infants through school-aged children. Students will observe children with special needs and discuss behavior management procedures to ensure appropriate academic development.

#### CCTX 1821X

Curso Avanzado - Padres y Hijos Comunidad Observación y Concientización

#### DFX 1201X / 1801X

#### Architecture Framework Basics

DoDAF Framework background, history, and planned evolution, government regulations, uses of architecture, framework philosophy, concepts and definitions, review of the DoDAF six step process, products overview and relationships, details of government regulations and reporting requirements, case Studies, comparison with other frameworks and methods, and overview of Universal Reference Resources for the DoD Framework.

#### DFX 1202X / 1802X

#### **Core and Supporting Products**

Overview of each of the 40 core and supporting products and their relationships from each of the DOD architecture framework views (operational, systems and technical). Understanding of how to model each of these products and to how to integrate them into a viable DOD Architecture Framework for different DoD functions, organizations, programs and operations. Each of these products represents a different type of model. Students learn how to create each product and use EA DoDAF specified tools.

#### DFX 1203X / 1803X

#### **Enterprise Architecture Planning**

Introduces the concepts and theories associated with organizational strategic planning as the basis for enterprise architecture, provides an examination of the Federal Enterprise Architecture Program Management Office reference

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models, how to define business architecture utilizing business strategy, goals and objectives, the technological environment and external variables including location, organizational culture and strategic business planning. Provides an understanding of how to plan and manage an EA project within an enterprise, including development of a statement of work, scheduling, requirements analysis, risk management, the role of security and information assurance, and the formulation of architectural principles.

#### DFX 1204X / 1804X

#### Advanced Architecture Modeling and Analysis

Overview of the supporting products and their relationship(s) to the core products and to each other; operational, systems and technical view for supporting products overview, data and activity modeling, LISI, TRM/JTA, security, CADM, XML and DoD Technical Reference Model (TRM) and Joint Technical Architecture (JTA).

#### DFX 1810X

**Enterprise Architecture Practicum and Thesis** 

#### DPX 1810X

#### Introduction to Dropout Prevention

This course provides an overview of the philosophy behind dropout prevention and the key elements of quality school site models. Learn elements of writing a successful application for a funded state department program. This course serves as a foundation for subsequent courses that define the strategies necessary to achieve dropout prevention outcomes and identify competencies required by the dropout prevention specialist.

#### DPX 1820X

#### Student Success Team (SST): The Real Secret of Prevention

Learn to investigate how to identify and inquire about the problems facing those students while being sensitive to the diversity of the population. The SST members develop an ongoing, monitored, individual support plan to address the students' needs and work to develop a solutions-oriented support plan.

#### DPX 1830X

#### Assessment and Accountability

Review ongoing assessment principles and practical strategies for gaining essential data and designing an improvement plan. Learn the continuous improvement process that begins and ends with the evaluation of student work.

#### DPX 1840X

#### Using School and Community Resources to Foster Student Resiliency

Focus on how schools institute resiliency factors to assist students and staff in overcoming personal, family, and institutional obstacles to achieve success. Strategies for bringing school staff, students, and community into the resilience effort are discussed. This class elaborates on heavily researched resiliency factors and how these factors can be institutionalized into schools. Also addressed is the need for school staff to broaden their mode of operation to become more community based and family-focused.

#### DPX 1850X

### Communication, Coordination of Services, Collaboratives, and School and Community Involvement

Explore the benefits of expanding the scope of potential support, involving community support agencies, parents, and interested community members. Definitions of the major components of school outreach (communication, coordination, collaboration, and school and community involvement) are also covered.

#### DPX 1860X

#### **Relevant Issues in Dropout Prevention**

Success for students in high-risk-failure schools is the real outcome of the DPS's efforts. The DPS serves as a school-wide catalyst in many areas of a school's improvement efforts. The DPS coordinates student support services from state and federal grants, local agencies, and parent and community efforts. Class discussions center on the relationship between the DPS and the school community.

#### EAX 1201X / 1801X

#### **Enterprise Architecture Concepts and Theory**

Introduces the basic concepts, theories, and documentation frameworks upon which enterprise architecture is based. Enterprise architecture is viewed as a management and documentation process, with approaches from the private, public, defense, and international sectors being presented. Analysis of all major enterprise architecture frameworks including Zachman, TOGAF (Open Group), Federal Enterprise Architecture Framework, Treasury Architecture Framework, Homeland Security Architecture Framework and the Department of Defense Architecture Framework. These are also compared with various versions used in the commercial sector. Highlighted areas include executive involvement, governance, value, and support for decisionmaking. Developing and implementing enterprise architecture programs are covered as is the training of the architecture team.

#### EAX 1202X / 1802X Enterprise Architecture Planning

#### Introduces the concepts and theories associated with organizational strategic planning as the basis for enterprise architecture, provides an examination of the Federal Enterprise Architecture Program Management Office reference models, how to define business architecture utilizing business strategy, goals and objectives, the technological environment and external variables including location, organizational culture and strategic business planning. Provides an understanding of how to plan and manage an EA project within an enterprise, including development of a statement of work, scheduling, requirements analysis, risk management, the role of security and information assurance, and the formulation of architectural principles.

#### EAX 1203X / 1803X

#### **Enterprise Architecture Implementation**

Analysis and integration of different Enterprise Architecture Methodologies, review of basic concepts in light of an integrated repository, Activity based costing and cost/benefits analysis, developing performance measures in the context of the OMB Reference Models (Performance Reference Model), Balanced Scorecard and GPRA, use of visual modeling from transition to implementation, managing and incorporation of legacy systems, information assurance and security architecture, stakeholder communication strategies and maintenance of EA as an asset within an enterprise.

#### EAX 1204X / 1804X

#### **Enterprise Architecture Integration**

This course covers the integration of EA components across the matrices of different frameworks (Zachman, FEAF, TEAF, TOGAF, etc) and the OMB Reference Models, the integration of business, technical, data and application architectures, configuration management and standards.

#### EAX 1810X

**Enterprise Architecture Practicum and Thesis** 

#### EDX 1201X

#### Computer-based Technology in the Classroom

This is a comprehensive overview of the use and integration of computer technology in the educational environment. Course content will address computer terminology, the Internet, impact of the use of different computer modalities, i.e., computers as a tool, tutor and tutee in education, selection and evaluation of educational software. Learning theories involved in the integration of computer technology are also covered. Also includes hands-on practice with computer tools, e.g., word processing, spreadsheet, database and presentation tools. Satisfies the CCTC technology requirement for a professional clear Ryan credential and the preliminary SB2042 credential

#### EDX 1229X

#### Educational Leadership in Charter Schools Today

This is a comprehensive course exploring contemporary and classical theories of leadership and how they can be put into practice in charter schools and other alternative educational settings. This course, offered through National University's Division of Extended Learning, addresses the same learning outcomes as EDA 614—Educational Leadership in Schools Today—and will be accepted in place of EDA 614 in the MS in Educational Administration program cohorts that are approved to meet the needs of future charter school leaders.

#### EDX 1842X

### Vocational Education Level I: The Instructional Process in Vocational Education and Techniques of Teaching

As more and more adult learners return to the classroom, it is important that teachers know how to reach this mature audience student population. This class will provide students with the concepts and developmental skills necessary for vocational instruction.

#### EDX 1843X

### Vocational Education Level II: Principles and Practices of Vocational Education

Building upon the concepts presented in Level I, this course provides a broad overview of vocational education.

#### EDX 1915X

#### California Subject Examination for Teachers (CSET) Math Subtest I Preparatory Course

This course emphasizes the math subtest one area: algebra and number theory. This informative, intensive course is designed to familiarize students with a variety of proven strategies for passing the CSET.

#### EDX 1916X

#### California Subject Examination for Teachers (CSET) Math Subtest II Preparatory Course

This course emphasizes the math subtest two area: geometry, probability and statistics. This informative, intensive course is designed to familiarize students with a variety of proven strategies for passing the CSET.

#### EDX 1920X

#### California Subject Examination for Teachers (CSET) Preparatory Course

This informative, intensive course is designed to familiarize students with a variety of proven strategies for passing the CSET. It emphasizes techniques for multiple choice and constructed response questions to help students effectively utilize knowledge of specific subject areas. It is a test preparation class only and is not a substitute for required class work.

#### EDX 1921X

#### California Subject Examination for Teachers (CSET) Multiple Subject: Test Taking Skills

Explore the structure of CSET-MS, with attention to time management, and lean about logic for test takers.

#### EDX 1922X

California Subject Examination for Teachers (CSET) Multiple Subject Subtest I: History/Social Science and Reading, Language, and Literature Topics covered: Reading instruction and literacy, reading comprehension; structure, conventions, and standardization of language; history of English, structure of words; literary genres and analysis, research skills. Major events and trends in California history and US history since 1492 and in world history since 3000 BC; systems of government, economics, and social science.

#### EDX 1923X

### California Subject Examination for Teachers (CSET) Multiple Subject Subtest II: Science and Math

Topics covered: Principles of physical, life, and earth science and how to apply them, the scientific method and experimental design. Computation with a calculator, principle of arithmetic, basic number theory, problemsolving, simple algebra, simple geometry, and simple probability and statistics.

#### EDX 1924X

#### California Subject Examination for Teachers (CSET) Multiple Subject Subtest III: Visual and Performing Arts, Physical Education and Human Development

Topics covered: Visual art, music, theatre, and dance; their history, elements, and forms. Principle of design and how to appreciate and teach the visual and performing arts.

Principle of movement, body mechanics, and fitness. Individual and social psychology, psychology of learning, classroom management, language acquisition.

#### EDX 1938X

#### **U.S. Constitution Preparatory Course and Examination**

This insightful, two-part course is designed to help students pass the U.S. Constitution exam, a requirement for the California teaching credential. Prior to taking the exam, students will review essential elements of the U.S. Constitution; analyze the meaning, amendments and judicial interpretation; and examine the Bill of Rights and the framers' intents.

#### EDX 1940X

#### **Reading Instruction Competence Assessment (RICA) Preparatory Course** This intensive, one-day course is specifically designed to help prepare current and future teachers to pass the new RICA Written Examination. It is a test preparation class only and is not a substitute for the required reading and reading instruction classes.

#### EEX 1201X

#### Fundamentals of Process Analysis and Optimization

This course provides the fundamentals of the concepts, tools and techniques for analyzing and optimizing engineering, manufacturing, and transactional processes. The course focuses on application of the Six Sigma methodology to improve process and product effectiveness. In addition, it provides technical expertise for selecting processes and products for improvement, defining improvement projects, developing improvement project plans, and implementing continuous measurable improvement projects.

#### EEX 1202X

#### **Operational Efficiency and Cost Effectiveness**

This course focuses on improving the efficiency and cost effectiveness of an enterprise. The course provides an understanding of the relationship between effectiveness and efficiency. It explores the application of Lean Enterprise to continuous measurable improvement projects. It focuses on the holistic approach to ensure processes are effective and efficient in achieving organizational goals and objectives while providing optimum customer satisfaction. This course also covers the Design for Lean Six Sigma methodology and its application to operational efficiency and cost effectiveness.

#### EEX 1203X

#### Fundamentals of Leading and Managing Continuous Measurable Improvement

This course focuses on the fundamentals of leading and managing continuous measurable improvement initiatives in business, industry and government. It covers leadership, continuous measurable improvement project leadership, continuous measurable improvement deployment strategies, and evaluation of continuous measurable improvement projects. This course also covers the fundamentals of continuous measurable improvement risks, benefits, roles and responsibilities, and technical methodologies.

#### EEX 1204X

#### Advanced Topics in Process Analysis

This course focuses on advanced continuous measurable improvement strategies. The course covers advanced topics in Design of Experiments including Taguchi Methods, Response Surface Methods, and Design for Lean Six Sigma. In addition it explores a range of issues affecting continuous measurable improvement strategies, e.g. risk mitigation, change management, and business trends.

#### EEX 1205X

#### Six Sigma Project Practicum

This course is the culmination of the continuous measurable improvement specialization course work. The intent of the Six Sigma project practicum is to demonstrate the application of Six Sigma problem solving tools and methodologies to solve an industry specific problem. In this course students will complete an improvement project using the knowledge gained in the four prior courses. Upon satisfactory completion of the course work and evaluation of the project report students will also be certified as a National University Lean Six Sigma Green Belt and Black Belt.

#### ETG 1901X

#### Creating a Successful Business Plan

Turn your business ideas into a solid plan for financing and long-term success.

#### ETG 1952X

#### **Fundamentals of Technical Writing**

Learn the skills you need to succeed in the well-paying field of technical writing.

#### ETG 1953X

#### The Keys to Effective Editing

If you aspire to be an editor, this course will teach you the fundamentals of top-notch editing for both fiction and nonfiction.

#### ETG 1956X

The Craft of Magazine Writing

If you're a determined new writer, this class will provide you with the skills you need to get published.

#### ETG 1957X

#### Writeriffic Creativity Training for Writers

Banish writer's block forever with these tricks from the published writer's toolbox.

#### ETG 1959X

#### **Travel Writing**

Profit from your experiences in exotic lands (or your own backyard) by learning how to write and sell travel articles and books.

#### ETG 1963X

#### Discover Digital Photography

An informative introduction to the fascinating world of digital photography equipment.

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#### ETG 1969X

#### Stocks, Bonds & Investing

The course will not only teach you about the stock markets, 401k plans, and retirement, but it will also address personal financial issues.

#### ETG 1972X

#### Starting a Consulting Practice

Find out how you can earn income by sharing your training or knowledge with others.

#### ETG 1973X

#### Start and Operate your own Home-Based Business

An experienced entrepreneur teaches you how to develop the motivation, discipline, and creativity to quit your job and be your own boss.

#### ETG 1977X

#### **Effective Business Writing**

Improve your career prospects by learning how to develop powerful written documents that draw readers in and keep them motivated to continue to the end.

#### ETG 1978X

#### **Business and Marketing Writing**

Write great marketing copy to improve your company's image and your chances of getting hired or promoted.

#### ETG 1981X

#### Introduction to Excel

Discover dozens of shortcuts and tricks for setting up fully formatted worksheets quickly and efficiently. Learn the secrets behind writing powerful formulas, using functions, sorting and analyzing data, creating custom charts, creating 3-dimensional workbooks, building links, and creating macros and custom toolbar buttons.

#### ETG 1982X

#### Medical Terminology: A Word Association Approach

This course teaches medical terminology according to each body system. Multiple graphics, study tips and unusual facts make for a most enjoyable course.

#### ETG 1983X

#### **Creating Web Pages II**

Create and post your very own Web site on the Internet in this extensive, hands-on, six week workshop.

#### ETG 1984X

#### Introduction to Flash 8

Learn how to create exciting interactive animations from a working Flash designer and author with more than a decade of experience in Flash development.

#### ETG 1985X

#### Achieving Top Search Engine Positions

Learn how to achieve top search engine positioning in this highly-interactive, six-week course. Discover how search engines work and how important events have shaped the entire Search Engine Optimization (SEO) industry.

#### ETG 1986X

#### Introduction to QuickBooks 2007

Learn how this well-designed program can make it a snap to set up a chart of accounts, reconcile your checking account, create and print invoices, receipts, and statements, track your payables, inventory, and receivables, create estimates, and generate reports.

#### ETG 1987X

#### **Introduction to Photoshop CS2**

Discover the fastest and most effective ways to use Photoshop from an expert and columnist for Photoshop User magazine.

#### ETG 1988X

#### Intermediate Photoshop CS2

If you understand the basics of the Photoshop toolset, this course will help you explore new and more advanced techniques for creating images, editing photos, and combining existing images in amazing ways.

#### ETG 1989X

#### Introduction to Microsoft Access 2003

Learn how to use Microsoft's powerful and award-winning database to store, locate, and print just about any type of important information.

#### ETG 1990X

#### Writing for Children

Join a published children's author and discover how you can touch the hearts of children by creating books for them.

#### ETG 1991X

#### Writeriffic 2: Advanced Creativity Training for Writers

In this highly interactive course, you'll master the insider methods of writing for personal satisfaction or for publication. You'll increase your creativity, beat writer's block, manage time, and know how to pitch ideas to publishers, agents, and editors.

#### ETG 1992X

#### Your Screenwriting Career

Learn how to write and sell professional-quality screenplays from a Hollywood veteran with experience in radio, video, television, film, and the Web.

#### ETG 1993X

#### **Becoming a Grant Writing Consultant**

Learn how you can use a basic knowledge of grant or proposal writing to become an expert in the red-hot grant consulting field.

#### ETG 1994X

#### Get Paid to Travel

Learn what it takes to become a professional tour director, tour guide, and cruise host. Topics to be covered include tour procedures, documentation, and handling emergencies. Gain information on full and part-time career opportunities, as well as prospective employers and much more.

#### ETG 1995X

#### Writing Effective Grant Proposals

Learn to prepare grant proposals that get solid results for your favorite organization or charity. Avoid the mistakes that get applications for wonderful projects tossed into the wastebasket! Learn how to write professional proposals that actually succeed.

#### ETG 1996X

#### Marketing Your Business on the Internet

Find out how you can affordably market your business on the Internet from an e-commerce expert. In this practical, hands-on course, you'll learn littleunderstood secrets about the types of businesses that thrive on the Web.

#### ETG 1997X

#### **Accounting Fundamentals**

You'll learn the basics of double-entry bookkeeping, while also learning how to analyze and record financial transactions, as well as prepare various financial reports at the end of the fiscal period.

#### ETG 1998X

#### **Real Estate Investing**

In this course, we'll demystify the technical aspects of acquiring and profiting from property. We'll explore how to find, finance, and negotiate a deal, how to invest in lease options, foreclosures, quick flips, rehabs, and mobile homes.

#### HEDX 1201X

#### Health Education for Teachers

This course provides an integrated curricula approach to health by infusing the components of nutrition, sexually transmitted diseases, and substance abuse (including alcohol, drugs, tobacco, and narcotics) into the general curriculum. It emphasizes promoting an overall healthy lifestyle that encourages life-long practices in students. Satisfies the CCTC health education requirement for a professional clear Ryan credential and the preliminary SB2042 credential. Does not grant graduate credit and cannot be used as an elective in a graduate program. This course cannot be used in place of HED 602 in graduate programs under the School of Education.

#### HSX 1900X

#### Medical Transcription

This online, instructor-led program will prepare you to start a new career as a Medical Transcriptionist. A medical terminology course is included at no extra cost. Transcriber and all materials included.

#### HSX 1901X

#### HIPAA Compliance (4 user licenses)

The HIPAA Compliance online program provides doctors and their staff with a simple route to compliance.

#### HSX 1904X

#### Microsoft Certified System Engineer 2003 (MCSE)

The online MCSE program will prepare students for Microsoft's national MCSE certification exam.

#### HSX 1905X

#### Microsoft Certified System Administrator 2003 (MCSA)

The online MCSA program will prepare students for Microsoft's national MCSA certification exam.

#### HSX 1906X

#### Microsoft Certified System Administrator Plus 2003 (MCSA+)

The online MCSA+ program will prepare students for Microsoft's national MCSA+ certification exam.

#### HSX 1907X

#### Microsoft Certified Database Administrator (MCDBA)

The online MCDBA program will prepare students for Microsoft's national MCDBA certification exam.

#### HSX 1908X

#### Linux+/LPI Level One Certification Training

This online program teaches the fundamentals of the Linux operating system including how to configure Linux system services, how to manage a Linux system in a networked environment, and finally, how to manage the servers a Linux system provides. Textbooks included.

#### HSX 1909X

#### Cisco™ CCNA® Certification Training

This online program provides students with the essential knowledge to install, configure, and operate simple routed LANs and WANs and obtain Cisco<sup>™</sup> Certified Network Associate (CCNA) certification. Textbook included.

#### HSX 1910X

#### Microsoft Office Specialist (MOS)

This online program is a comprehensive, performance-based program that teaches students to be proficient using the most popular suite of Microsoft Office 2003 programs including Word, Excel, Power Point, Outlook, and Access. Textbooks included.

#### HSX 1911X

#### Security+ Certification Training

This online Security+ course helps prepare a student for the CompTia Security+ certification exam. Textbook included.

#### HSX 1912X

#### Network+/Server+ Certification Training

This online program will prepare students for both Network+ and Server+ national certification exams.

#### HSX 1913X

#### Graphic Design

This online program begins with the fundamentals of design and guides the student through the terms and processes they will use to turn their knowledge of design into a career.

#### HSX 1914X

#### AutoCAD 2007

This online program will teach you the skills needed to create and edit simple drawings and gradually introduces more advanced AutoCAD skills. AutoCAD 2007 student software and textbook included.

#### HSX 1915X

#### Help Desk Specialist

The Help Desk Specialist online program will prepare students for a challenging technical support role. Textbooks included.

#### HSX 1917X

#### **Records Management**

Gatlin's online record management certificate course is a power packed online training program that will teach you how to manage electronic records and conquer the paper pile-up. Textbook included.

#### HSX 1918X

#### eBusiness

The primary objective of this online program is to introduce concepts, tools and approaches to eBusiness. Textbook included.

#### HSX 1920X

#### Web Database Developer

The Web Database Developer online program will provide students with intermediate and advanced knowledge and skills in utilizing and leveraging databases on the Internet. Textbooks included.

#### HSX 1921X

#### Search Engine Marketing

The Search Engine Marketer series is a bundle of five courses designed for persons who want to jump-start their career path in the fast-paced search engine industry.

#### HSX 1922X

#### Pay Per Click Marketing

This nationally recognized Pay Per Click Marketing (PPCM) online course and training program has been developed because of the high demand for Pay Per Click marketing specialists.

#### HSX 1923X

#### Search Engine Optimization

This nationally recognized search engine optimization (SEO) online course and training program has been developed because of the high demand for search engine specialists.

#### HSX 1924X

Wedding Planner This nationally recognized wedding planner course teaches the student how to become a successful wedding planner and coordinator. This comprehensive program covers everything an aspiring wedding planner needs to know to get started in the business.

#### HSX 1925X

#### **HVAC** Technician

This nationally recognized HVAC online course and training program is offered in partnership with HVACReducation.net to bring you the only online HVAC Core Technician Training program of its kind on the web.

#### HSX 1926X

#### Veterinary Assistant

This nationally recognized Administrative Veterinary Assistant online course and training program prepares students for an exciting new career as an administrative veterinary assistant.

#### HSX 1927X

#### Administrative Dental Assistant

This nationally recognized Administrative Dental Assistant online certificate program teaches the essential administrative tasks for managing the business aspects of a dental practice and becoming an Administrative Dental Assistant.

#### HSX 1928X

#### Home Inspection Certificate

The nationally recognized Home Inspection online course and training program covers the principal components of home inspection procedures and processes.

#### HSX 1930X

#### Bookkeeping the Easy Way

This course is designed for students who are interested in gaining knowledge of basic bookkeeping practices in planning a more profitable future or seeking a new career. Textbook and thorough tutorial for Quick Books are included.

#### HSX 1931X

#### **Certified Bookkeeper**

This online course for experienced bookkeepers leads to national certification with the American Institute of Professional Bookkeepers (AIPB). All textbooks included.

#### HSX 1932X

#### CompTIA A+ Certification

Those holding the CompTIA A+ certification have a broad base of knowledge and competency in core hardware and operating system technologies including installation, configuration, diagnosing, preventative maintenance, and basic networking.

#### HSX 1933X

#### **Project Management Professional**

This program teaches the basics of project management and includes preparation for the Project Management Professional national certification exam. Textbook and exam prep included.

# **Division of Extended Learning**

#### HSX 1934X

#### **Revenue Cycle Management for Healthcare Providers**

Revenue Cycle Management for Healthcare Providers will teach students the skills necessary to evaluate the performance of revenue cycle systems and processes.

#### HSX 1935X

#### Six Sigma Greenbelt

Six Sigma is one of the highest standards for companies and individuals to achieve. This interactive online experience provides the skills needed to affect this highly valuable skill as well as prep for the national certification. All materials included.

#### HSX 1936X

#### **Travel Agent Certification Preparation**

This industry-leading program will prepare students for the Institute of Certified Travel Agents TAP Certification teaches the basic skills needed to operate a computer reservation system. All materials included.

#### HSX 1937X

#### Webmaster Certification

This online Webmaster program begins by teaching simple web page development and progresses by introducing new concepts by involving you in active web page implementation using HTML and Dynamic HTML. Textbook included.

#### IHD 1203X

#### Facilitating Outcomes: Language, Learning, Speech and Listening

This course will provide knowledge and resources related to facilitating the acquisition of language, learning, speech, sign language, and/or listening, amplification technologies, and communication facilitation strategies.

#### NBCX 1201X / 1800X

#### National Board Certification Academy

NBC Teacher Academy provides new and active NBCT candidates with a year-long, comprehensive approach to support and assistance. All aspects of the certification process are explored while candidates develop a strong, fundamental foundation and increased competence in identifying and increasing content and instructional knowledge, application, and articulation of skills and approaches.

#### NBCX 1801X

#### Monthly Collaborative Sessions with Online Supplement

The monthly collaborative provides teachers with an opportunity to network, analyze their practice and portfolio commentaries against the certificate standards in a group setting. The sessions provide NBCT candidates with a flexible, yet comprehensive approach to support, collaboration and assistance.

#### PDX 1800X

#### Entrepreneurship as a Life Skill

This self-paced hybrid online course focuses on the concept that entrepreneurship is everywhere and it is a necessary life skill in the global knowledge economy. This course also involves a hands-on, Saturday workshop.

#### PDX 1803X

#### **GLOBE Science Education Workshop**

GLOBE is a worldwide, primary and secondary school-based education and science program. GLOBE promotes and supports students, teachers and scientists to collaborate on inquiry-based investigations of the environment and the Earth System working in close partnership with NSF and NASA Earth System Science Projects. GLOBE is a K-12 science education program that brings together students, teachers and scientists through the GLOBE Schools Network in support of student learning and research. The hands-on program provides students and teachers with an opportunity to learn by 1) taking scientifically valid measurements in the fields of atmosphere, hydrology, soils, and land cover/phenology - depending upon their local curricula, 2) reporting their data through the Internet, and 3) Collaborating with scientists are available for instructional purposes.

#### PDX 1805X

#### **Music and Culture Connection**

This course deals with an historical and contemporary survey of music and its profound influence on shaping, morphing, challenging, and defining the social, political, and cultural landscapes throughout the world. This asynchronous online course examines music's role beyond the obvious aesthetics of an art form to that as a catalyst and vehicle for major shifts in cultural mores. It reviews some of the major historical social shifts attributed to or furthered by music's influence. The course also focus on contemporary culture and deals with the overwhelming permeation of hip hop music on world youth, the economy, language, learning, social mores, fashion, and the media. It is designed to improve methods of communicating, understanding, and educating students and members of the community.

#### PLA

### Paralegal course descriptions are located in the Course Description section of the catalog.

#### TEDX 1823X

#### Attention Deficit Disorder: Information & Interventions for Effective Teaching

Covering the history of the disorder, accepted methods to assess and identify students with the disorder, and various methods, medications and strategies that are currently used to treat the disorder, this self-paced CD ROM course will help teachers achieve a better understanding of ADD and intervention strategies to facilitate positive student change. For situations where a student needs services beyond what teachers can provide in the classroom, this course covers the referral process for getting help for the student. Reference materials include a list of resources for both teachers and parents who would like more help or information about ADD or ADHD.

#### TEDX 1824X

#### Advanced Classroom Management: Children as Change Agents

This course is geared primarily for professionals serving children and youths presenting behavior problems in the school or community. This course focuses on cognitive and cognitive-behavioral interventions (often lumped together under the rubric "social skills") with an emphasis on teaching students how to change and manage their own behavior. Since previous knowledge and understanding of traditional behavioral (operant) concepts and strategies is required, it is strongly recommended that you take an introductory behavior management course to learn the basic terms and concepts of behavior management prior to taking this "advanced" course.

#### TEDX 1825X

Educational Assessment: Assessing Student Learning in the Classroom This course is designed to further develop the conceptual and technical skills required by teachers to help them identify their educational goals, and implement meaningful instructional strategies for effective learning by students with special needs. The focus of this course will therefore be on assessment for instructional programming. The course will outline procedures for designing or selecting, administering and interpreting, a variety of informal assessment measures typically used in schools. The presentation of assessment information in an acceptable format to parents and teachers will also be addressed.

#### **TEDX 1826X**

### Traumatized Child: The Effects of Stress, Trauma, and Violence on Student Learning

This course is designed to help classroom teachers, school counselors, and other educational personnel gain strategies to reach and teach students who have been affected by stress, trauma, and/or violence. Participants will learn the signs and symptoms of stress and trauma. Participants will explore how stress, violence, and trauma affect a student's learning, cognitive brain development, and social-emotional development. The short and long term consequences of being exposed to stress, trauma, or violence, as well as the social and family causes, will be reviewed. Participants will learn the dynamics of domestic violence and community violence. The educator's role in the intervention and prevention of violence will be discussed.

#### TEDX 1827X

#### Teaching Diversity: Influences and Issues in the Classroom

This course is designed to give you the knowledge, tools and dispositions to effectively facilitate a diverse classroom. This course will help you understand and identify differences in approaches to learning and performance, including different learning styles and ways in which students demonstrate learning. An emphasis in this course will be on understanding how students' learning is influenced by individual experiences, talents, disabilities, gender, language, culture, family and community values. You will be challenged to apply knowledge of the richness of contributions from our diverse society to your teaching field.

#### **TEDX 1844X**

#### Behavior is Language Strategies for Managing Disruptive Behavior

This self-paced CD ROM course is designed to give teachers a new perspective on student behavior and effective tools to facilitate positive student change. Participants will learn behavioral techniques and intervention strategies that quell disruptive behavior, reduce power struggles

while increasing classroom control, reduce workload, and help prevent burnout. After successfully completing this course, participants will be better equipped to find and implement creative, effective solutions to behavioral problems.

#### TEDX 1845X

#### Violence in Schools

This self-paced CD ROM is designed to give teachers a better understanding of school violence, the motivations behind the use of violence and specific strategies to minimize the occurrence of violence in a school and community. The correlation and impact of the media, community and family upon violence will be investigated.

#### TEDX 1846X Learning Disabilities

### Practical Information for Classroom Teachers

This self-paced CD ROM course describes diverse theoretical approaches to handling learning disabilities in the classroom. This course lays the foundation for sensitive, appropriate assessment and evaluation of students. In addition, the course covers program planning and implementation, stresses the importance of a close, positive partnership with parents or alternative caregivers, and explores methods for ensuring that the homeschool axis is effective and meaningful. Teachers will also learn about major trends and unresolved issues in the field of learning disabilities.

#### TEDX 1848X Drugs & Alcohol in School

#### Understanding Substance Use & Abuse

Take this self-paced CD ROM course to gain a more comprehensive understanding of alcohol, drugs and their influences in the classroom. This course provides a contextual framework for understanding what students may be experiencing either through their own substance use or from the substance use of persons close to them. This course provides a basic historical perspective of substance use along with the biological, psychological and social factors that comprise the disease of addiction. Upon course completion, teachers will better understand the complex dynamics that contribute to this biological and social phenomenon.

#### TEDX 1849X

#### Autism & Asperger's Disorder

This self-paced CD ROM provides information on the characteristics of the disorder, learning styles associated with the disorder, communication weaknesses and various intervention strategies that have proven to be successful when working with students with Autism spectrum disorders.

#### TEDX 1851X

#### **Functional Analysis**

#### Introduction to Completing Behavior Assessments

This interactive self-paced CD ROM course will help teachers achieve a better understanding of Functional Behavior Assessment (FBA) and Positive Behavior Support (PBS) strategies that students can use to facilitate positive student behavior. Because the results of FBAs often lead to proactive intervention, this course is particularly useful for educators who work with students with disabilities. This course includes an overview of the hierarchy of assessment procedures used to conduct FBAs, and details the procedures and treatment packages that can be implemented based on the results of functional analyses. Particular emphasis is placed on reinforcement-based interventions and dimensions of reinforcement.

#### TEDX 1868X

### Inclusion: Working with Special Needs Students in Mainstream Classrooms

This interactive, self-paced CD ROM course is designed to help special and general educators gain a better understanding of inclusion, an educational reform movement that advocates educating students with disabilities in the general education classrooms. Upon course completion, teachers will be able to define key concepts and terms, identify and describe federal legislature and court cases, and describe the federal definition of students entitled to special services. This course will also help teachers identify their role in providing special services to students educated in inclusive classrooms.

#### TEDX 1871X

#### Understanding Aggression

#### Coping with Aggressive Behavior in the Classroom

Understanding aggression includes topics on violence, aggression in the classroom, youth gangs, and aggression in sports and on television, how drugs and alcohol play a role in aggression and violence, and "hot spots" that tend to breed aggression and violence. The self-paced CD ROM course helps school personnel become more aware of the causes of aggression and ways to evaluate aggression and intervene before it turns to violence in the schools. The course also addresses aggression in our communities through

driving, dating, sports, television, music and how these issues are dealt with in modern society.

#### TEDX 1872X Talented & Gifted Education Working with High Achievers

Talented and Gifted Education provides information on the history of the exceptional in relation to education, current law, and accepted methods for referral, assessment, and identification of these students. The self-paced CD ROM course also covers major program models and methods of differentiating instruction to meet the rate and level of learning of those students identified. The curriculum reviews ways to meet the affective needs of the gifted and talented student in the regular classroom and lists resources for teachers and parents.

#### TEDX 1879X

#### Child Abuse: Working with the Abused & Neglected

This interactive, self-paced CD ROM program shows teachers how to recognize the signs of physical abuse, emotional abuse, sexual abuse, physical neglect and emotional neglect in children. Participants will also explore the specific factors that exist in families who abuse or neglect their children. This course meets the child abuse and neglect educational requirements in most states.

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The University of Values

### National University Language Institute

The National University Language Institute serves the needs of a wide range of local and international students and promotes collaboration for education and community outreach in languages and cultures.

National University Language Institute 11355 North Torrey Pines Road, La Jolla, CA 92037 Phone: 1 (800) NAT-UNIV, ext. 8165 (858) 642-8165, Fax: (858) 642-8747, Web: www.nu.edu

### Accreditation

American Association of Intensive English Programs (AAIEP)

### Memberships

- National Association of Self-Instructional Language Programs (NASILP)
- American Association of Intensive English Programs (AAIEP)
- National Association of International Educators (NAFSA)
- Teachers of English to Speakers of Other Languages (TESOL)
- California Teachers of English to Speakers of Other Languages (CATESOL)
- Professional International Educators Roundtable (PIER) San Diego region

### **Credit Courses**

National University operates on the quarter system and all academic credit is awarded in quarter units. Students who plan to apply credits earned through the Language Institute to an academic degree program should consult the appropriate academic department to ascertain whether academic credits earned will transfer toward their proposed program of study. All courses to which academic credit is applied are 4.5 quarter units, unless otherwise specified, and follow National University's illustrated tuition rates for undergraduate courses. The Language Institute reserves the right to modify tuition and/or program rates at any time.

### **Non-Credit Courses**

These courses carry neither academic credit nor CEUs. They are offered in response to the growing need for quality language and cultural educational opportunities for professional, career, personal growth, or general cultural interest and knowledge.

## **Grading System**

#### Grade Definition

- A Exceptional
- B Very Good
- C Satisfactory
- D Marginal
- F Failing
- S Satisfactory
- U Unsatisfactory/No Credit

#### **Financial Aid**

Language Institute students are generally not eligible to receive federal financial aid, although alternative funding options are available. Students planning to enroll in non-credit courses may apply for an IT Skills Loan, Key Career Loan, or Sallie Mae Career Loan. These agencies are not affiliated with the Language Institute or National University. Additionally, the Language Institute provides guidance to students who are utilizing funds through Tuition Assistance, Veteran's Assistance, and /or the Workforce Investment Act. The Language Institute does work with students who are seeking financial aid for certificate programs that grant academic credit. Financial aid is available through two methods: National University Tuition Assistance Loan and Federal Financial Aid through Title IV.

#### Veterans' Information

Students wishing to apply for programs administered by the Department of Veterans' Affairs can obtain information on how to apply for their benefits by calling or visiting the Veterans' Affairs Office located at 9388 Lightwave Avenue, San Diego, (858) 541-7970, or (800) 628-8648, ext. 7970. For more information, please call (800) 628-8648, ext. 8600.

### **Tuition**

Tuition rates in effect as of September 03, 2007.

| Course Level 4.5 d | quarter units | 3 quarter units | 1.5 quarter units |
|--------------------|---------------|-----------------|-------------------|
| 100 through 200    | \$1215        | \$810           | \$405             |

All academic courses follow the above tuition rates.

#### **Refund/Withdrawal Requests**

Students enrolled in credit courses from the Language Institute should refer to the Policies and Procedures section in this catalog for drop, withdrawal, and refund deadlines and amounts.

To secure a refund, please contact the Language Institute. In all cases in which refunds are awarded, the cost of books and materials will be deducted. Non-attendance or notifying an instructor does not constitute officially dropping or withdrawing from a course.

All English Language Programs (ELP) courses: In order to receive a refund you must withdraw or drop before the first day of class.

#### **Corporate Training**

Corporate training is available for businesses or school districts through the Language Institute. Classes can be held at a place of business or at a National University campus. Each program can be tailored to target an organization's unique challenges and in-house training programs can be customized to any specifications necessary.

#### **Payment Options**

Payment can be made by either telephone, fax, or in person. Checks and any one of the following credit cards are accepted for your convenience: American Express, Discover, Visa, or MasterCard. Company invoicing is also available.

### Language Institute's Certificate and Course Offerings

Certificates in Language and Culture consist of intensive proficiency-oriented coursework in Arabic, Chinese, or Persian language acquisition, as well as instruction in essential knowledge and understanding of history, culture, geography, and politics of the Middle East and China. The programs prepare students for a variety of career paths in government, military, business, and education.

#### **Program Outcomes**

A graduate of the Certificate in Arabic, Chinese, or Persian Language and Culture should be able to demonstrate:

- An intermediate proficiency in listening, speaking, reading, and writing of Arabic, Chinese, or Persian.
- The ability to read simple modern texts in Arabic, Chinese, or Persian.
- A basic working knowledge of Arabic, Chinese, or Persian grammar, morphology, and vocabulary.
- An understanding of major aspects of the Arabic, Chinese, or Persian culture and civilization.

#### • Certificate in Arabic Language and Culture

Faculty Advisor: Mahmoud Al Dabbagh • (858) 642-8444 • mdabbagh@nu.edu

To receive the Certificate in Arabic Language and Culture, students must complete at least 18 quarter units as listed below:

#### **Certificate Requirements**

(6 courses; 18 quarter units)

| ARB 100  | Beginning Arabic I                            |
|----------|---|
|          | (Co-requisite: ARB 100A)                      |
| ARB 100A | Beginning Arabic I Lab (1.5 quarter units)    |
|          | (Co-requisite: ARB 100)                       |
| ARB 101  | Beginning Arabic II                           |
|          | (Prerequisites: ARB 100/100A)                 |
|          | (Co-requisite: ARB 101A)                      |
| ARB 101A | Beginning Arabic II Lab (1.5 quarter units)   |
|          | (Prerequisites: ARB 100/100A)                 |
|          | (Co-requisite: ARB 101)                       |
| ARB 200  | Intermediate Arabic I                         |
|          | (Prerequisites: ARB 101/101A)                 |
|          | (Co-requisite: ARB 200A)                      |
| ARB 200A | Intermediate Arabic I Lab (1.5 quarter units) |
|          | (Prerequisites: ARB 101/101A)                 |
|          | (Co-requisite: ARB 200)                       |
|          | -   |

### • Certificate in Chinese Language and Culture

Faculty Advisor: Michael M. Day • (858) 642-8327 • mday@nu.edu

#### **Certificate Requirements**

(6 courses; 18 quarter units)

To receive the Certificate in Chinese Language and Culture, students must complete at least 18 quarter units as listed below:

| CHN 100  | Beginning Chinese I                            |
|----------|--|
|          | (Co-requisite: CHN 100A)                       |
| CHN 100A | Beginning Chinese I Lab (1.5 quarter units)    |
|          | (Co-requisite: CHN 100)                        |
| CHN 101  | Beginning Chinese II                           |
|          | (Prerequisite: CHN 100/100A)                   |
|          | (Co-requisite: CHN 101A)                       |
| CHN 101A | Beginning Chinese II Lab (1.5 quarter units)   |
|          | (Prerequisite: CHN 100/100A)                   |
|          | (Co-requisite: CHN 101)                        |
| CHN 200  | Intermediate Chinese I                         |
|          | (Prerequisite: CHN 101/101A)                   |
|          | (Co-requisite: CHN 200A)                       |
| CHN 200A | Intermediate Chinese I Lab (1.5 quarter units) |
|          | (Prerequisites: CHN 101/101A)                  |
|          | (Co-requisite: CHN 200)                        |

# • Certificate in Persian Language and Culture (670-589)

Faculty Advisor: John Lown • (858) 642-8397 • jlown@nu.edu

To receive the Certificate in Persian Language and Culture, students must complete at least 18 quarter units as listed below:

#### **Certificate Requirements**

(6 courses, 18.0 quarter units)

| FAS 100  | Beginning Persian I                            |
|----------|--|
|          | (Co-requisite: FAS 100A)                       |
| FAS 100A | Beginning Persian I Lab (1.5 quarter units)    |
|          | (Co-requisite: FAS 100)                        |
| FAS 101  | Beginning Persian II                           |
|          | (Prerequisites: FAS 100/100A)                  |
|          | (Co-requisite: FAS 101A)                       |
| FAS 101A | Beginning Persian II Lab (1.5 quarter units)   |
|          | (Prerequisites: FAS 100/100A)                  |
|          | (Co-requisite: FAS 101)                        |
| FAS 200  | Intermediate Persian I                         |
|          | (Prerequisites: FAS 101/101A)                  |
|          | (Co-requisite: FAS 200A)                       |
| FAS 200A | Intermediate Persian I Lab (1.5 quarter units) |
|          | (Prerequisites: FAS 101/101A)                  |
|          | (Co-requisite: FAS 200)                        |
|          | •  |

### Language and Cultural Seminars

These seminars are non-credit courses designed to teach students useful phrases, as well as essential cultural and historical information for successful social interaction. The module's components will be accessible for repeated review and practice over a 90-day period. The online seminars are self-paced allowing students to navigate through the content at a pace appropriate to their learning style and speed.

Access to Seminar Content: 90 Days Cost: \$300

The following seminars are available through the Language Institute:

| ARB 2000X | Arabic Language and Cultural Seminar  |
|-----------|---------------------------------------|
| CHN 2000X | Chinese Language and Cultural Seminar |
| FAS 2000X | Persian Language and Cultural Seminar |

### English Language Programs (ELP)

#### Language Proficiency

Students can complete the University's language proficiency requirement through the English Language Programs University Preparation program onsite or online. International students who need English proficiency are tested and placed in the appropriate class level. English language classes follow the University calendar and provide 100 hours of instruction per month. At the end of each month, students are evaluated for advancement. Students in the advanced level can apply for early admission to academic courses.

#### **University Preparation Program**

The University Preparation program is an intensive program designed for high school graduates, university students, or professionals who plan to attend National University or another U.S. college or university and/or want to improve their academic skills for professional career advancement.

This program follows a four-week format and provides 100 hours of instruction per month. Courses range from beginning through advanced levels. Each level consists of two courses and can be completed in two months. Classes are offered at all levels every month.

Graduation from the 800 level fulfills the National University language proficiency requirement so the Test of English as a Foreign Language (TOEFL) examination is not required.

English Language levels consist of core courses increasing in difficulty and complexity from beginning to advanced levels.

**Levels 400 - Beginning:** These levels are designed for those who have had no exposure to the English Language, have absolutely minimal knowledge of the English language, or have minimal skills in conversation, reading, and writing.

**Levels 500 - Beginning Intermediate:** These levels are designed for those with more-than-basic skills in grammar and writing, and sufficient skills for beginning reading, vocabulary, listening, and speaking.

**Levels 600 - Intermediate:** These levels are designed for those with intermediate skills in grammar and writing, and sufficient skills for intermediate reading, vocabulary, listening, and speaking.

**Level 700 – Intermediate Advanced:** In this level, students are given high-fluency-level lessons in all the four core components: reading, writing, grammar, and speaking.

**Level 800 – Advanced:** In this highest level in the University Preparation program, students work on developing all of their skills and preparing for the academic programs. Emphasis is on writing and research method, presentation skills, and accent reduction.

There are six main components covered in each of the ESL courses:

#### 1. Reading

Students improve their reading ability by learning and practicing key reading comprehension and vocabulary skills.

#### 2. Vocabulary Development

Students expand their vocabulary through various types of activities as well as presentation of roots, suffixes and affixes.

#### 3. Grammar and Writing

The rules of English grammar are studied and used in context at the different levels. The focus is on applying grammar structures to written communication.

#### 4. Writing and Editing

Students learn writing skills from developing basic paragraphs, summaries and outlines to composing full-length essays. Activities include academic writing, informal/free writing and grammar-based writing.

#### 5. Listening

Non-native English speakers in this course improve their listening and note-taking skills by discussing tapes and lectures. This gives students many opportunities to interact with each other and with the instructor.

#### 6. Speaking

Students gain proficiency in oral communication through group discussions and individual presentations, and by discussing personal as well as academic topics. In the more advanced levels, students give short speeches and participate in group discussions. Small groups allow students to interact with each other and with the instructor. In addition, each course level offers a variety of enhancement topics such as idiomatic expressions and cinema, writing research papers and newsletters, conducting academic research, world celebrations, American culture, the American legal system, and U.S. culture and history.

Tuition rates in effect as of September 03, 2007 for ESL courses are \$1,215 per course.

| ESL 1410X | Beginning ESL I                                |
|-----------|--|
| ESL 1420X | Beginning ESL II                               |
| ESL 1510X | Beginning Intermediate ESL I                   |
| ESL 1520X | Beginning Intermediate ESL II                  |
| ESL 1610X | Intermediate ESL I                             |
| ESL 1620X | Intermediate ESL II                            |
| ESL 1710X | Intermediate Advanced ESL I                    |
| ESL 1720X | Intermediate Advanced ESL II                   |
| ESL 1810X | Advanced ESL I (Communication/Presentation)    |
| ESL 1820X | Advanced ESL II (Writing and Research Seminar) |

There are several programs offered through the Language Institute for students who want to study the English language but do not plan to enroll in a bachelor's or master's degree program at National University. Please contact an advisor for more information at <u>languageinfo@nu.edu</u>.

### **English Communication Program**

This program is designed for individuals who want to improve their English communication skills for purposes of professional advancement or simply for personal enjoyment. This program focuses on developing fluency in listening, speaking, and reading along with writing and grammar. The program provides 100 hours of instruction per month.

Classes are offered at all levels from beginning to advanced levels every month following the National University monthly format.

#### **Conversation and American Culture**

This is a special, short-term vacation program designed for groups or individuals who want to improve their English conversation skills and learn more about American culture.

Tuition per course: \$1,215 Activity fee per course: \$25

Classroom instruction in Conversation is combined with various social and recreational activities, emphasizing the study of American culture and lifestyle. The program has three to four hours of instruction per day.

#### Specialized Course Program

The courses in this program are designed for high level ESL students, academic international students, or individuals who want to improve their skills in specific areas such as writing and oral communication.

Tuition rates for specialized courses are \$300 per course.

#### **Research and Writing Skills**

Students learn writing skills, from developing basic paragraphs, summaries and outlines, to composing full-length essays. Activities include academic writing, informal/free writing, and grammar-based writing. The components of gathering research are also discussed. Topics include methods in information gathering, theme development, document structure, and source documentation.

#### **Accent Reduction Workshop**

The course gives students the tools and practice they need to improve their pronunciation of American English. The students work intensively on correct vowel and consonant formation, word stress, sentence stress, intonation, and rhythm. This is done by evaluating individual student needs and addressing problem areas.

#### **Customized Group Programs**

ELP offers customized programs for special groups in the health and business fields.

### Teaching English to Speakers of Other Languages (TESOL) Certificate Program

The Language Institute's Certificate in TESOL is a comprehensive series of five content courses that culminate in a practicum project designed to offer maximum teaching experience to participants. The principal goal of the certificate is to develop participants' teaching skills through hands-on practice and to give them the knowledge and confidence to teach ESL at any level.

Tuition rates for TESOL courses are \$450 per course with a one-time \$60 application fee.

Length: 220 hours/6 courses Cost: \$2700

Before entering a live ESL classroom to work alongside an experienced instructor, students will study a variety of courses, including:

| TSL 1400X | Theories and Methods of Language Teaching and |
|-----------|---|
|           | Acquisition (36 hours)                        |

- TSL 1401X Structure of English and Grammar Teaching Techniques (36 hours)
- TSL 1402X Teaching Reading and Writing (36 hours)
- TSL 1403X Teaching Listening and Speaking (36 hours)
- TSL 1404X Practical Issues in Second Language Pedagogy (36 hours)
- TSL 1405X TESOL Practicum (40 hours)

Interested students can apply directly to 9388 Lightwave Avenue, San Diego, CA 92123 or call (858) 541-7968.

### Language Institute Course Descriptions

#### ARB 100

Beginning Arabic I

(Co-requisite: ARB 100A) This is the beginning course in Modern Standard Arabic (MSA). Elementary skills in the standard communication modes of speaking, reading, and listening to Arabic are introduced. The course includes an introduction to the

Arabic alphabet and numerals and usage of basic vocabulary. **ARB 100A** 

#### **Beginning Arabic I Laboratory** (Co-requisite: ARB 100)

This is an intensive online laboratory course in which the student interacts in a speaking and listening mode to a programmed sequence of language units. These are parallel to the corresponding materials covered in ARB 100, Beginning Arabic.

### ARB 101

**Beginning Arabic II** (Prerequisites: ARB 100/ARB 100A) (Co-requisite: ARB 101A) This course is a secuel to the beginning course

This course is a sequel to the beginning course in Modern Standard Arabic (MSA). The course includes an introduction to the basic parts of an Arabic

sentence and the basic written Arabic phrases for oral and reading comprehension.

#### ARB 101A

**Beginning Arabic II: Laboratory** (Prerequisites: ARB 100/100A)

(Co-requisite: ARB 101)

This laboratory course involves students in the use of common Arabic terms orally in situational context. The student will be involved in oral interpretation of the basic spoken Arabic phrases. Elementary skills in the standard communication modes of speaking, reading, writing, and listening to Arabic are emphasized.

#### ARB 200

Intermediate Arabic I

(Prerequisites: ARB 101/101A)

(Co-requisite: ARB 200A)

This course enhances the student's proficiency in spoken and written Modern Standard Arabic (MSA). This course emphasizes the difference between standard and dialectic spoken Arabic. Emphasis is given to both formal and informal Arabic. Grammar and vocabulary are expanded.

#### ARB 200A

Intermediate Arabic I, Laboratory

(Prerequisites: ARB 101/101A) (Co-requisite: ARB 200)

In this laboratory course emphasis is given to both formal and informal Arabic. This course enhances the student's proficiency in standard and dialectic spoken Arabic. Emphasis is given to both formal and informal Arabic. Grammar and vocabulary are expanded.

#### ARB 2000X

#### Arabic Language and Cultural Seminar

The Arabic seminar is designed to teach students useful phrases, as well as essential cultural and historical information for successful social interaction. The seminar is comprised of short streaming videos on culture, history and language; interactive political and geography lessons; and entertaining language and culture quiz/games.

#### CHN 100

#### Beginning Chinese I

(Co-requisite: CHN 100A) This is the beginning course in Modern Standard Chinese (MSC). Elementary skills in the standard communication modes of speaking, reading, and listening to Chinese are introduced. The course includes an introduction to Chinese characters, "Pinyin" and usage of basic vocabulary.

#### CHN 100A

#### **Beginning Chinese I Laboratory**

(Co-requisite: CHN 100)

This is an intensive online laboratory course in which the student interacts in a speaking and listening mode to a programmed sequence of language units. These are parallel to the corresponding materials covered in CHN 100, Beginning Chinese.

#### CHN 101

**Beginning Chinese II** (Prerequisites: CHN 100, CHN 100A) (Co-requisite: CHN 101A) This course is a sequel to the beginning course in Modern Standard Chinese (MSC). The course includes an introduction to the basic parts of a Chinese sentence and the basic written Chinese phrases for oral and reading comprehension.

#### CHN 101A

#### **Beginning Chinese II: Laboratory**

(Prerequisites: CHN 100, CHN 100A)

(Co-requisite: CHN 101)

This laboratory course involves students in the use of common Chinese terms orally in situational context. The student will be involved in oral interpretation of the basic spoken Chinese phrases. Elementary skills in the standard communication modes of speaking, reading, writing, and listening to Chinese are emphasized.

#### CHN 200

Intermediate Chinese I (Prerequisites: CHN 101, CHN 101A) (Co-requisite CHN 200A) This course enhances the student's proficiency in spoken and written Modern

Standard Chinese (MSC). This course emphasizes the difference between standard and dialectic spoken Chinese. Emphasis is given to both formal and informal Chinese. Grammar and vocabulary are expanded.

#### CHN 200A

#### Intermediate Chinese I, Laboratory

(Prerequisites: CHN 101, CHN 101A) (Co-requisite: CHN 200)

In this laboratory course emphasis is given to both formal and informal Chinese. This course enhances the student's proficiency in standard spoken Chinese. Emphasis is given to both formal and informal Chinese. Grammar and vocabulary are expanded.

#### CHN 2000X

#### **Chinese Language and Cultural Seminar**

The Chinese seminar is designed to teach students useful phrases, as well as essential cultural and historical information for successful social interaction. The seminar is comprised of short streaming videos on culture, history and language; interactive political and geography lessons; and entertaining language and culture quiz/games.

#### FAS 100

#### Beginning Persian I

(Co-requisite: FAS 100A)

This is the beginning course in Persian. Elementary skills in the standard communication modes of speaking, reading, and listening to Persian are introduced. The course includes an introduction to the Persian alphabet and numerals and usage of basic vocabulary.

#### **FAS 100A**

#### **Beginning Persian I Laboratory**

#### (Co-requisite FAS 100A)

This is an intensive online laboratory course in which the student interacts in a speaking and listening mode to a programmed sequence of language units. These are parallel to the corresponding materials covered in FAS 100, Beginning Persian I.

#### FAS 101

**Beginning Persian II** (Prerequisites: FAS 100, FAS 100A)

(Co-requisite: FAS 101A)

This course is a sequel to the beginning course in Persian. The course includes an introduction to the basic parts of a Persian sentence and the basic written Persian phrases for oral and reading comprehension.

#### FAS 101A

#### **Beginning Persian II: Laboratory**

(Co-requisites FAS 101)

(Prerequisites: FAS 100/100A)

This laboratory course involves students in the use of common Persian terms orally in situational context. The student will be involved in oral interpretation of the basic spoken Persian phrases. Elementary skills in the standard communication modes of speaking, reading, writing, and listening to Persian are emphasized.

#### FAS 200

Intermediate Persian I

(Prerequisites: FAS 101/101A)

(Co-requisite: FAS 200A)

This course enhances the student's proficiency in spoken and written Persian. This course emphasizes the difference between formal and colloquial Persian. Emphasis is given to both spoken and written Persian. Grammar and vocabulary are expanded.

#### FAS 200A

#### Intermediate Persian I, Laboratory

(Co-requisite: FAS 200)

(Prerequisites: FAS 101/101A)

In this laboratory course emphasis is given to both formal and informal Persian. This course enhances the student's proficiency in standard and spoken Persian. Grammar and vocabulary are expanded.

#### FAS 2000X

#### Persian Language and Cultural Seminar

The Persian seminar is designed to teach students useful phrases, as well as essential cultural and historical information for successful social interaction. The seminar is comprised of short streaming videos on culture, history and language; interactive political and geography lessons; and entertaining language and culture quiz/games.

#### TSL 1400X

#### Theories and Methods of Language Teaching and Acquisition

Beginning from a historical perspective, this course covers the most prominent theories of second language pedagogy. These will serve as a springboard for discussion and reflection about the process of teaching, before moving on to more concrete issues such as learning styles, cultural influences, and personality factors. This course will introduce concepts that participants can modify and apply in subsequent courses in the series, thus helping to create a personalized teaching style.

#### TSL 1401X

#### Structure of English and Grammar Teaching Techniques

The purpose of this course is twofold: (1) to help students acquire the necessary foundation and sense of grammar and (2) to give students practical and immediately applicable techniques they can use to teach grammar to their students. Topics include:

- Discussion of common problem areas for students
- English specific to academic writing
- · Games and activities to make grammar accessible to students
- TOEFL-related grammar issues

#### TSL 1402X

#### Teaching Reading and Writing

This course introduces the topics typically covered in ESL reading/writing courses and also provides techniques for teaching these topics. The course covers strategies for testing reading and writing, TOEFL-specific reading and writing issues; and practical and lively games designed to reinforce important topics.

#### TSL 1403X

#### Teaching Listening and Speaking

Students are introduced to the topics typically covered in ESL listening/speaking courses, as well as the techniques for teaching these topics. For listening, topics include note-taking, and use of videos and songs. For speaking, topics of discussion range from dialog-based production at the lowest levels to speech preparation and delivery at the highest. This course will also discuss strategies for testing, listening, speaking, TOEFL-specific listening comprehension issues, and practical and lively games designed to reinforce important topics.

#### TSL 1404X

#### Practical Issues in Second Language Pedagogy

This course will cover topics such as lesson planning, teaching materials, classroom interaction and management; all essential to efficient teaching. Other topics include the teaching of vocabulary, pronunciation and other subjects sometimes deemed "elective" classes. Upon completion, participants will have acquired the tools necessary to teach in the ESL classroom.

#### TSL 1900X

#### **TESOL Practicum**

A 40-hour observation and teaching program is the final step in attaining a Professional Certificate in Teaching English as a Second Language. This practicum allows students to display their newly acquired knowledge and skills by working side-by-side with an experienced ESL teacher in a classroom environment.

Students wishing to take the TESOL Practicum must speak with the project coordinator to receive the necessary details, such as evaluation procedures, forms, placement and requirements needed to successfully complete the practicum. This course is required for a Professional Certificate in Teaching English as a Second Language.

Prefix/Subject Area by School National University Course Numbering Course Descriptions



The University of Values

# Prefix/Subject Area by National University School

| Colle  | ge of Letters and Sciences       |      | Schoo  | ol of Engineering and Technology  |      |
|--------|----------------------------------|------|--------|-----------------------------------|------|
| Prefix | Subject Area                     | Page | Prefix | Subject Area                      | Page |
| ADR    | Alternate Dispute Resolution     | 304  | CÉN    | Construction Engineering          | 309  |
| ARB    | Arabic                           | 305  | CIS    | Information Systems               | 310  |
| ART    | Art                              | 305  | CSC    | Computer Science                  | 315  |
| ASL    | American Sign Language           | 305  | DAF    | Defense Architectural Framework   | 316  |
| BGS    | General Studies                  | 306  | DAT    | Database                          | 317  |
| BIS    | Interdisciplinary Studies        | 306  | DEN    | Design Engineering                | 317  |
| CHD    | Chemical Dependency              | 310  | EEA    | Enterprise Architecture           | 324  |
| CHN    | Chinese                          | 210  | EGR    | Engineering                       | 324  |
| CJA    | Criminal Justice Administration  | 311  | ENE    | Environmental Engineering         | 326  |
| DSM    | Domestic Security Management     | 319  | ENM    | Engineering Management            | 328  |
| ENG    | English                          | 327  | IEM    | Industrial Engineering            | 341  |
| FAS    | Farsi (Persian)                  | 330  | ITM    | Information Technology Management | 342  |
| FRA    | Foreign Language Arabic          | 332  | LSS    | Lean Six Sigma                    | 347  |
| FRC    | Foreign Language Chinese         | 333  | PME    | Project Management                | 366  |
| FRP    | Foreign Language Persian (Farsi) | 333  | SCL    | Supply Chain Logistics            | 371  |
| FSC    | Forensic Sciences                | 333  | SEN    | Software Engineering              | 372  |
| GLS    | Global Studies                   | 334  | SSE    | Safety and Security Engineering   | 374  |
| HIS    | History                          | 337  | SYE    | Systems Engineering               | 375  |
| HUB    | Human Behavior                   | 340  | TMG    | Technology Management             | 378  |
| HUM    | Humanities                       | 341  | WCM    |                                   | 379  |
| ILR    | Information Literacy             | 342  |        |                                   |      |
| LAS    | Language Arts                    | 344  | Schoo  | ol of Health and Human Services   |      |
| LAW    | Law                              | 344  | Prefix | Subject Area                      | Page |
| LIT    | Literature                       | 346  | ADC    | Alcohol and Drug Counseling       | 304  |
| LUS    | Luiseno                          | 347  |        | Community                         | 312  |
| MCW    | Creative Writing                 | 349  | COH    | Community Health                  | 313  |
| MSM    | Multiple Subject Matter          | 354  | GER    | Gerontology                       | 334  |
| MTH    | Mathematics                      | 355  | HCA    | Healthcare Administration         | 334  |
| MUS    | Music                            | 359  | HED    | Health Education                  | 336  |
| PAD    | Public Administration            | 362  | HLT    | Health                            | 339  |
| PHL    | Philosophy                       | 364  | HSC    | Health Science                    | 340  |
| PLA    | Paralegal Studies                | 365  | HTM    | Healthcare Technology Management  | 340  |
| POL    | Political Science                | 367  | MBL    | Medical Billing                   | 349  |
| PSY    | Psychology                       | 367  | MRA    | Master Regulatory Affairs         | 354  |
| SCI    | Natural Sciences                 | 369  | NSG    | Nursing                           | 360  |
| SOC    | Sociology                        | 372  | PHY    | Physical Education                | 364  |
| THR    | Theater                          | 378  |        | ,,                                |      |
|        |                                  |      |        |                                   |      |

#### School of Business and Management

| Prefix | Subject Area  | Page |
|--------|---|------|
| AĆC    | Accounting  | 303  |
| BKM    | Business Knowledge Management                       | 306  |
| BUS    | Business  | 308  |
| ECO    | Economics   | 321  |
| ELB    | Electronic Business                                 | 325  |
| EMB    | Executive Master in Business (plus Spanish version) | 325  |
| FIN    | Finance   | 331  |
| HCM    | Hospitality and Casino Management                   | 335  |
| HRM    | Human Resources Management                          | 339  |
| IBU    | International Business                              | 341  |
| LED    | Organizational Leadership                           | 345  |
| MGT    | Management  | 352  |
| MKT    | Marketing   | 353  |
| MNS    | Management Science                                  | 354  |
| ODV    | Organizational Development                          | 362  |
| SMG    | Sports Management                                   | 372  |

#### **School of Education**

| Prefix | Subject Area                                     | Page |
|--------|--|------|
| ABA    | Applied Behavior Analysis                        | 303  |
| BTE    | Bilingual Teacher Education                      | 307  |
| CED    | Counselor Education                              | 309  |
| CLD    | Cross-Cultural, Language and Academic Dev (CLAD) | 312  |
| DHH    | Deaf and Hard-of-Hearing                         | 318  |
| ECE    | Early Childhood Education                        | 319  |
| EDA    | Educational Administration                       | 321  |
| EXC    | Special Education                                | 328  |
| ILD    | Instructional Leadership                         | 342  |
| MAT    | Master of Arts in Teaching                       | 348  |
| MTE    | Master of Education in Teaching                  | 352  |
| NBC    | National Board Certified                         | 360  |
| PED    | School Psychology                                | 363  |
| TED    | Teacher Education                                | 375  |

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|------------|--|------|
| Prefix     | Subject Area   | Page |
| CEN        | Construction Engineering   | 309  |
| CIS        | Information Systems  | 310  |
| CSC        | Computer Science   | 315  |
| DAF        | Defense Architectural Framework  | 316  |
| DAT        | Database   | 317  |
| DEN        | Design Engineering   | 317  |
| EEA        | Enterprise Architecture  | 324  |
| EGR        | Engineering  | 324  |
| ENE        | Environmental Engineering  | 326  |
| ENM        | Engineering Management   | 328  |
| IEM        | Industrial Engineering   | 341  |
| ITM        | Information Technology Management  | 342  |
| LSS        | Lean Six Sigma   | 347  |
| PME        | Project Management   | 366  |
| SCL        | Supply Chain Logistics   | 371  |
| SEN        | Software Engineering   | 372  |
| SSE        | Safety and Security Engineering  | 374  |
| SYE        | Systems Engineering  | 375  |
| TMG        |  | 378  |
| WCM        | Wireless Communications  | 379  |
| Schoo      | ol of Health and Human Services  |      |
| Prefix     |  | Page |
| ADC        |  | 304  |
| CMM        |  | 312  |
| COH        | Community Health   | 313  |
| GER        | Gerontology  | 334  |
| HCA        | Healthcare Administration  | 334  |
| HED        | Health Education   | 336  |
| HLT        | Health   | 339  |
| HSC        | Health Science   | 340  |
| HTM        | Healthcare Technology Management   | 340  |
| MBL        | Medical Billing  | 349  |
| MRA        |  | 354  |
| NSG        | Nursing  | 360  |
| PHY        | Physical Education   | 364  |
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#### School of Media and Communication

| Prefix | Subject Area                               | Page |
|--------|--|------|
| BRO    | Broadcast Media                            | 307  |
| COM    | Communications                             | 314  |
| EDT    | Educational and Instructional Technology   | 323  |
| JRN    | Journalism                                 | 343  |
| MDC    | Digital Cinema                             | 350  |
| MGP    | Video Game Production                      | 351  |
| MUL    | Digital Entertainment and Interactive Arts | 357  |
|        | -  |      |

#### University Course Numbering System

0- to 99- Level Courses: Remedial courses that do not grant collegiate credit.

100- to 200- Level Courses: Lower-Division courses applicable to Associate degrees.

300- to 400- Level Courses: Upper-Division courses applicable to Bachelor degrees.

500-Level Courses: Courses which may be applicable as advanced upper-division credit or as graduate credit, as specified by the requirements of each degree program.

600-Level Courses: Graduate level courses.

Note: All courses are 4.5 quarter units unless otherwise specified.

#### **University Grading Criteria**

All classes are graded except as noted in the course descriptions.

#### Courses

- H Honors
- S Satisfactory
- U Unsatisfactory

Please refer to the undergraduate and/or graduate policies section for additional information.

#### ABA – Applied Behavior Analysis

#### ABA 601

#### Basic Behavioral Analytic Principles - I: Assessment and Research Design

Introduces the student to the philosophy of behaviorism and the basic tenets of applied behavior analysis. Focuses on behavioral assessment and observation, and time series research design and its use in the scientific evaluation of behavior-environment relations.

#### ABA 602

#### Basic Behavioral Analytic Principles - II: Basic Processes

(Prerequisite: ABA 601)

This course focuses on the fundamental aspects of behavior change strategies and tactics, such as stimulus control and the nature of reinforcing and aversive stimuli and their properties, and how these properties influence behavior change processes. Basic and applied empirical research demonstrating these strategies are covered.

#### ABA 603

#### Basic Behavioral Analytic Principles – III: Applications

(Prerequisite: ABA 602)

This course is a continuation of ABA 602, and covers the complex aspects of behavior change strategies that are built upon the fundamental behavioral principles. Detailed examples of behavior change strategies from the basic and applied research literature are covered. Major topics covered include verbal behavior, generalization and maintenance, contingency contracting, and self-management.

#### ABA 604

#### Advanced Applied Behavior Analysis: Applications of Behavioral Principles in School Settings

(Prerequisite: ABA 603)

Examines functional assessment and functional analysis procedures, with a focus on educational settings, including special and general education. Emphasis is on providing students with an understanding of both procedural and conceptual issues surrounding evidence-based intervention design for children with severe behavior problems.

#### ABA 605

#### Advanced Applied Behavior Analysis: Applications of Behavioral Principles in the Technology of Teaching (Prerequisite: ABA 604)

Examines advanced issues related to designing and evaluating behavioral assessment and instructional interventions in educational systems. The focus will be on scientifically supported methods of instruction and behavior change methods, such as direct instruction and precision teaching.

#### ACC – Accounting

#### ACC 201

#### Financial Accounting Fundamentals

A survey of basic accounting theory and the application of accounting principles, this course includes the recording and summarization of business transactions in the form of financial statements under the rules of "generally accepted accounting principals" (GAAP). It is designed for students who have little or no prior knowledge of financial accounting, this course corresponds to "Principles of Accounting I" at other colleges.

#### ACC 202

#### Managerial Accounting Fundamentals (Prerequisite: ACC 201)

This course is an overview of the use of financial accounting and cost accounting data for the design and preparation of reports to aid management in organizing, directing, controlling, and decision-making functions. The topics include the fundamentals of cost accounting, budgeting and responsibility accounting for cost and profit centers.

#### ACC 300

### Applied Technology for Accountants (*Prerequisite: ACC 201*)

This course familiarizes accounting majors with the technological tools and resources needed for career opportunities in both financial and managerial accounting areas. Emphasized are the adaptation of computer accounting software to the specific needs of an enterprise, as well as the design and use of spreadsheet models to perform specialized accounting and finance-related tasks.

#### ACC 410A

#### Intermediate Accounting I (Prerequisite: ACC 201)

Often referred to as "Intermediate Accounting," ACC 410A, B, and C cover a substantial portion of the U.S. accounting standards known as GAAP (generally accepted accounting principles). In particular, ACC 410A provides an in-depth review of the accounting process, the principal financial statements, accounting concepts, theory and application of the time value of money, and accounting for cash, receivables, and inventories.

#### ACC 410B

#### Intermediate Accounting II

(Prerequisite: ACC 201)

Often referred to as "Intermediate Accounting," (See ACC 410A for a series description.) ACC 410B covers accounting for plant, property and equipment, intangible assets, investments, current and long-term liabilities, and stockholders' equity and retained earnings.

#### ACC 410C

#### Intermediate Accounting III (Prerequisite: ACC 201)

Often referred to as "Intermediate Accounting," (See ACC 410A for a series description.) ACC 410C covers revenue and expense recognition, accounting for leases, pensions, income taxes, earnings per share, accounting changes and errors, segment and interim reporting, and preparation of the statement of cash flows.

#### ACC 431

Advanced Accounting

(*Prerequisite: ACC 201*) An examination of advanced concepts of accounting for business combinations, with emphasis on the consolidation of parent/subsidiary balance sheet and income statement reporting. It also covers accounting for the formation, operation, and liquidation of partnerships, as well as special reporting requirements for multinational entities.

#### ACC 432A

#### Taxation-Individual

(Prerequisite: ACC 201) An introduction to the theory and practice of federal income taxation of individuals, including income, deductions, exemptions, credits, capital gains, depreciation, and deferred compensation plans. As a course requirement, students prepare Form 1040

#### ACC 432B

#### Taxation-Business

income tax returns.

(*Prerequisite: ACC 432A*) An introduction to the theory and practice of federal income taxation of partnerships, subchapter S, and subchapter C corporations. Students learn the use of tax research publications.

#### ACC 433A

#### Managerial Accounting I

(Prerequisite: ACC 201) A study of cost accounting principles and procedures including fixed, variable and mixed costs, break-even point analysis, job order costing, process costing, standard costing, activity based costing, variance analysis for variable and fixed costs, budgeting (static and flexible budgets), and preparation of variable and absorption costing statements.

#### ACC 433B

#### **Managerial Accounting II** (*Prerequisite: ACC* 433*A*)

A continuation of Managerial Accounting I, this course covers additional managerial accounting topics for decision-making including relevant costs, balanced scorecard, value added and non-value added costs, allocations of indirect costs using direct, step, and reciprocal methods, allocating joint cost, main and by-product costing, determination of Economic Order Quantity (EOQ), accounting for spoilage, transfer pricing, performance measurement, and capital budgeting techniques.

#### ACC 434

#### **Government and Nonprofit Accounting** (*Prerequisite: ACC 201*)

A study of the specialized accounting principles applicable to state and local governments and other non-profit organizations, with an emphasis on fund accounting principles used in the recording of assets, liabilities, equity, revenues and expenditures. Also covers the analysis and interpretation of financial statements of such governmental and nonprofit entities.

#### ACC 435A

#### Auditing I (Prerequisite: ACC 201)

A study of financial statement audits by CPAs per-

formed in accordance with AICPA generally accepted auditing standards. Topics include professional ethics, legal liabilities, the planning of audit engagements, internal control and its relationship to the nature, timing and extent of evidence-gathering procedures, EDP controls and audit sampling.

#### ACC 435B

#### Auditing II (Prerequisite: ACC 435A)

A continuation of ACC 435A, this course focuses on the auditing procedures of individual financial statement line items including cash, receivables, inventory, payables, long-term debt, equity balances and related income statement accounts. Also emphasizes the writing of auditor's reports, special reports and review and compilation reports in accordance with AICPA standards.

#### ACC 501

### Accounting Fundamentals (Formerly BUS 501A) (two weeks)

An introduction to accounting for students with no previous exposure to the subject, this two-week course covers accounting and financial statement terminology and the analysis of financial statements. Grading is S/U only.

#### ACC 604

Managerial Accounting (Prerequisite: ACC501)

A study of accounting concepts and reporting techniques applied in a management decision-making context, Students analyze accounting data from realworld case studies and present their analysis, conclusions, and recommendations. Managerial accounting models used by diverse enterprises in virtually all industrialized nations include cost accounting and the behavior of costs, budgeting, differential analysis, and responsibility accounting are examined. Reporting techniques involving the use of current spreadsheet and graphic presentation technology are presented.

#### ACC 650A

#### Financial Accounting Theory I

(Prerequisite: ACC 201 or equivalent taken within two years of the start of the course)

Often referred to as "Intermediate Accounting," ACC 650A and B is a comprehensive two-course sequence covering a substantial portion of the U.S. financial reporting principles known as GAAP (generally accepted accounting principles). In particular, ACC 650A provides us an in-depth review of the accounting process and preparation of the principal financial statements. This course emphasizes revenue and expense recognition, along with the accounting for cash, receivables, inventories, and plant, property and equipment.

#### ACC 650B

#### Financial Accounting Theory II (Prerequisite: ACC 201)

The second course of a comprehensive two-course sequence covering a substantial portion of U.S financial reporting principles known as GAAP, ACC 650B covers accounting for intangible assets, invest-ments, current and long-term liabilities, stockholders' equity, investments, income taxes, compensation, leases, accounting changes and errors, earnings per share, and statement of cash flows

#### ACC 652

#### Taxation for Investors and Managers (Prerequisite: ACC 201)

Theory and practice of federal income taxation of individuals, partnerships and corporations, including capital gains, depreciation, and deferred compensation rules and regulations are covered.

#### ACC 655

#### Auditing and Internal Control

(Prerequisite: ACC 201) Financial statement audits and other assurance services performed by independent auditors in accor-dance with AICPA generally accepted auditing stan-dards are examined, with emphasis on internal control principles and procedures.

#### ACC 657

#### Accounting Information Systems

(Prerequisite: ACC 201)

The design and internal control perspectives of accounting information systems, including systems analysis, decision support systems, system imple-mentation, and the audit of management information systems are studied.

#### ACC 690

#### **Guided Study**

This course is individual study under the direction of an instructor. It requires prior approval of the appropriate academic department.

#### ADC – Alcohol and Drug Counseling

#### ADC 200

#### Sociological Perspectives on Alcoholism and Drug Addiction

This course will examine the history of alcohol and other mood-changing drugs in the United States; the myths and stereotypes of alcohol use; the socio-cultural factors that contribute to the use of drugs; and the patterns and progressions of alcoholism. A variety of different aspects and perspectives for understanding alcohol and drug use behaviors will be explored.

#### ADC 210

#### Physiological and Pharmacological Aspects of Substance Abuse

This course is designed to examine the effects of alcohol and similar legal/ illegal psychoactive drugs to the body and in behavior. Areas to be covered include tolerance, gender differences, and the disease model. Students will be presented with pharmacological and physiological treatment/ recovery strategies to assist in forming the most appropriate level of care.

#### ADC 220

#### **Counseling Techniques/Practical Applications**

This course will provide the major theories and techniques of alcohol and drug counseling. The focus is to make practical application of theory and technique to clinical and case study situations. This course is designed to provide familiarity with the relevant techniques and comfort with the applications of those techniques.

### ADC 230

#### **Counseling Special Populations** This course focuses on how to provide alcohol and drug counseling to special populations. The basic counseling theories and techniques may be utilized, however emphasis placed on awareness and knowledge of the special population's needs, can positively influence the course of treatment. Therapeutic

approaches need to be adapted to the uniqueness of the individual.

#### ADC 240

#### Treatment Approaches for Alcoholism and Substance Abuse Counselor

This course is designed to cover the major therapeutic orientations related to alcohol and substance abuse counseling. The course will familiarize students with the therapeutic progression and current issues as applied to the treatment unit. Assessment, formulation of treatment plans, and relapse prevention will be addressed. Utilize individual, family and group counseling for treatment of alcohol and drug abuse.

#### ADC 250

#### Alcoholism and Substance Abuse prevention and Intervention Education

This course is designed to cover the concepts of prevention, community education, and community outreach. In addition, this course will provide education and prevention models and the role of community groups in these models. The effectiveness of alternative prevention strategies, education and training methods, and adult education techniques will be included.

#### ADC 260

#### **Chemical dependency and Psychiatric Illness**

This course is designed to examine the dual diagnosis of chemical dependency and psychiatric illness. Whether there is a correlation of each is independent of the other, treatment needs to be provided for both diagnoses for a successful recovery and relapse prevention

#### ADC 270

#### Legal and Ethical Practices for Drug and Alcohol Counselors

This course considers various ethical and legal issues that influence the practice of drug and alcohol counseling. Topics include ethical systems and standards, legal systems and issues. Students will have the opportunity to develop their own standards and explore their values for further clarification.

#### ADC 280

#### Personal and Professional Growth (1.5 units)

The course will focus on two interrelated parts, personal growth and professional growth. In order to be an effective counselor, an awareness of one's own thoughts, feeling, and experience needs to occur. This course is designed to allow students to work through or at least become cognitively aware of their own issues and counter transference. Self awareness is the beginning to becoming a better alcohol and drug abuse counselor.

#### ADC 299

#### Practicum - Field Work 255 Hours

This course consists of 45 classroom hours taught by an instructor who will see that the student completes 255 hours at an approved agency setting where direct supervision is provided by a qualified staff person. The instructor will be available for consultation with the student. Group supervision, individual consultation, and case review will focus on difficult aspects of case management for the beginning counselor. The 255 practicum hours needs to be completed within one year of the practicum class.

#### ADR – Alternate Dispute Resolution

#### ADR 400

#### Alternative Dispute Resolution Processes

This introductory course will provide students with a broad understanding of ADR. The course will cover Negotiation, Mediation, Arbitration how each is used, and the advantages and disadvantages of each method. The course utilizes role plays, simulations, and case studies.

#### ADR 405

#### **Negotiation Fundamentals**

An introductory interactive course designed for students and the business professional to develop the verbal and analytical skills required to perform effectively as a negotiator in conflict situations. Students will participate in negotiating exercises, and learn different negotiating techniques through simulations, videos, and case studies.

#### ADR 410

#### **Facilitation Fundamentals**

An interactive, introductory course designed for students and business professionals to develop an understanding of group dynamics and decision making as a basis for learning the roles, processes and techniques of group facilitation. The course utilizes role plays, simulations, and case studies

#### ADR 415

#### **Mediation Fundamentals**

An introductory interactive and entertaining course designed for students and business professionals to develop the skills required to perform effectively as a mediator. Students will be introduced to different mediation styles such as facilitative, transformative, and evaluative methods. The course utilizes negotiating principles, role plays, videos, and case studies.

#### ADR 420

#### **Communication and Conflict**

This course will explore workplace, interpersonal and team conflict dynamics and methods for effective communication in such conflict situations. Participants will learn communication skills for resolving such conflicts for themselves, between others and within a team or group, and strategies for preventing or defusing rising conflict. Additionally, participants will learn how to integrate conflict resolution into various organizational cultures.

#### ADR 425

### Cultural Issues in Conflict Management

This course will explore the nature of cultural differences in various conflict situations. Through the examination of various cultural perceptions, participants will learn how to apply concepts of cultural fluency in a variety of conflicting cultural scenarios, and employ personal, interpersonal and inter group skills to bridge cultural differences and achieve mutually beneficial outcomes. Students will participate in role plays, videos, and case studies to enhance their understanding of these issues.

#### ADR 430

#### **Ethics and Neutrality**

This course explores the behavior of mediators, arbitrators and other neutrals to avoid conflicts of interest and perceived partiality. Through case study and role playing the participant will learn appropriate behavior that improves the quality of the process, enhances competency and promotes acceptance of and confidence in ADR processes. Students will be introduced to topics such as how to remain impartial during a mediation, avoiding conflicts of interest, quality of the process, competency, confidentiality and promoting public confidence in the mediation process

#### ADR 600

#### Alternative Dispute Resolution

An advanced interactive course designed to deepen students' understanding of the field of Alternative Dispute Resolution, including an in-depth analysis of the primary dispute resolution processes currently in use (mediation, arbitration, facilitation, neutral evaluation, and neutral fact finding for employment complaints). This course will trace the history of ADR in the United States and examine its contemporary usage in the commercial sector. Applications of dispute resolution processes in everyday business situations will be emphasized. This workshop style course will utilize role play exercises, interactive exercises, video demonstrations, and other hands-on techniques to enable students to practice dispute resolution skills and to experience various ADR processes.

#### ADR 605 Negotiation

An advanced interactive course designed to develop the verbal and analytical skills required by ADR professionals to perform effectively as a negotiator in any conflict situation. In addition, the course will provide an opportunity for the students to identify their strengths as a negotiator and to identify and improve any weaknesses. The course utilizes advanced negotiating principles, sophisticated hands-on simulations, written planning documents, videos, written self critiques and case studies.

#### ADR 610

#### Facilitation

An advanced, interactive course designed to develop dispute resolutions and consensus building processes for group settings. The course will teach group facilitation theory, and processes and techniques necessary to effectively perform as a group facilitator. The course utilizes large group simulations and role plays, and case studies.

#### ADR 615

#### Mediation

An advanced interactive course designed to develop the skills required to perform effectively as a mediator. The course teaches the stages of mediation and the necessary skills a mediator must have in order to perform effectively for each stage. The course also covers the various steps required in reaching settlement and drafting settlement agreements. The course utilizes advanced mediating principles, sophisticated hands-on simulations, written planning documents, videos, written self critiques and case studies.

#### ADR 620

#### Arbitration

An interactive, course that enables students to participate in sophisticated simulations and mock arbitration both as advocates and arbitrators, prepare opening and closing statements and draft written decisions. Students will be introduced to Arbitration Statues and Commercial Arbitration Rules. The course will also provide students with insight into the Ethical and Professional Standards of Responsibility required of Arbitrators. Areas of focus are labor relations, securities, construction, personal injury, consumer-related disputes and commercial transactions.

#### ADR 625

#### **Crisis Negotiation**

Theory and practice of the dynamics involved in crisis negotiations with emphasis placed on domestic hostage incidents. The course utilizes a combination of psychological and communication approaches to crisis negotiation to signify the dynamics created between hostages and negotiators. Students will gain experience through role playing, and case studies.

#### ADR 630

Labor Negotiation

Students and business professionals will learn the art of collective bargaining. How labor and manage-

ment in a unionized environment reach agreement regarding employee wages, benefits and other terms and conditions of employment. Participants will engage in face-to-face negotiations experiencing first-hand the economic dynamics at play, developing tactical strategies to achieve (mutually) beneficial results.

#### ARB – Arabic

#### ARB 100

Beginning Arabic I

(Co-requisite: ARB 100A) This is the beginning course in Modern Standard Arabic (MSA). Elementary skills in the standard communication modes of speaking, reading and listening to Arabic are introduced. The course includes an introduction to the Arabic alphabet and numerals and usage of basic vocabulary.

#### ARB 100A

#### Beginning Arabic I Laboratory (1.5 quarter units) (Co-requisite: ARB 100)

This is an intensive online laboratory course in which the student interacts in a speaking and listening mode to a programmed sequence of language units. These are parallel to the corresponding materials covered in ARB 100, Beginning Arabic.

#### ARB 101

Beginning Arabic II (Prerequisites: ARB 100/ARB 100A) (Co-requisite: ARB 101A) This course is a sequel to the beginning course in Modern Standard Arabic (MSA). The course includes an introduction to the basic parts of an Arabic sentence and the basic written Arabic phrases for oral and reading comprehension.

### ARB 101A

### **Beginning Arabic II: Laboratory** (1.5 quarter units)

(Co-requisites: ARB 100/100A) (Co-requisite: ARB 101) This laboratory course involves students in the use of common Arabic terms orally in situational context. The student will be involved in oral interpretation of the basic spoken Arabic phrases. Elementary skills in the standard communication modes of speaking, reading, and writing and listening to Arabic are emphasized.

#### ARB 200

Intermediate Arabic I (Prerequisites: ARB 101/101A) (Co-requisite: ARB 200A) This course enhances the student's proficiency in spoken and written Modern Standard Arabic (MSA). This course emphasizes the difference between standard and dialectic spoken Arabic. Emphasis is given to both formal and informal Arabic. Grammar and vocabulary are expanded.

#### ARB 200A

#### Intermediate Arabic I, Laboratory

(1.5 quarter units)
(Prerequisites: ARB 101/101A)
(Co-requisite: ARB 200)
In this course emphasis is given to both formal and informal Arabic. This course enhances the student's proficiency in standard and dialectic spoken Arabic. Emphasis is given to both formal and informal Arabic. Grammar and vocabulary are expanded.

#### ART – Art

ART 100

#### Introduction to Art History (Prerequisites: ENG 100/101)

(Prerequisites: ENG 100/101) A survey of the main periods and traditions in art history, with emphasis on the complex relationship between art and society. Explores traditions including the Renaissance, Gothic, Baroque, Rococo, classical, Neoclassicism, impressionism, expressionism,

# **Course Descriptions**

realism, fantasy, environment art, architecture, formalism and contemporary avant-garde forms.

#### ART 200

#### Visual Arts

Fundamentals of visual and applied arts presented through painting, photography, video, or other media. Emphasis is determined by instructor. Students develop an awareness of aesthetic values, learn how to handle materials and develop an understanding of formal, technical and conceptual issues. Students supply some laboratory materials.

#### ART 200A

#### Visual Arts Laboratory

(Prerequisite: ART 200)

The laboratory portion of Visual Arts, in which students focus on hands-on work.

#### ART 315

#### Film as Art (Prerequisites: ENG 100/101)

A survey of the art of cinema from the silent period to the present, with emphasis on the social construction, distribution and consumption of film in historical context. Examines basic film techniques and theories and systematically explores diverse film styles and genres. Focuses on elements of film such as lighting, editing and cinematography. Develops awareness of film as a complex artistic text. Establishes a basis by which students can make their own aesthetic judgments. In addition to contemporary mainstream films, students view classic, independent, experimental and foreign films.

#### ART 323

#### Modern Art

(Prerequisites: ENG 100/101)

An introduction to the major movements, styles and artists from Impressionism to Post Modernism. Examines how themes of Modern Art reflect the social, historical and cultural events of the period.

#### ART 329

#### World Art + (Prerequisites: ENG 100/101)

The fundamentals of visual and applied arts from a global perspective. Focuses on the art of India, China, Japan, Pre-Columbian Central and South America, Native North America, Oceania and Australia, Africa and the Middle East. Also covers the accelerated changes in world art since 1945 and diversity issues related to world art.

#### ART 400

#### **Expressive and Integrative Arts**

(Prerequisites: ART 200, MUS 100, MSM 301, PSY 301 or equivalents)

The course prepares the student to integrate the arts into daily instruction in grades K-8. The course emphasizes recognition of cultural diversity through activities in the arts as well as a basic knowledge of content areas for planning appropriate cross-curricular activities.

#### ART 490

#### Guided Study

(1.5-4.5 quarter units) Individual study under direction of instructor. Requires prior approval of appropriate academic department.

#### ASL – American Sign Language

#### ASL 120

#### American Sign Language I

Designed as an introduction to American Sign Language (ASL) for those with no previous experience. Students will learn basic ASL skills used in a variety of situations. The class is taught using American Sign Language. Voice and written communication are kept to a minimum. Deaf cultural studies are the thematic components throughout the course.

#### ASL 220

American Sign Language II (Prerequisite: ASL 120)

Designed as a continuation of American Sign Language I. It is intended for those with some background and experience in ASL and American Finger-Spelling. Students will learn intermediate ASL skills used in a variety of situations, including the kinesics, morphology, and syntax of ASL. Idiomatic expression is included. This class is taught using American Sign Language. Voice and written communications are kept to a minimum. Deaf cultural studies are the thematic components throughout the course.

#### ASL 320

#### American Sign Language III

(Prerequisite: ASL 220) Designed as a continuation of American Sign Language II. It is intended for advanced students with intermediate background and experience in ASL and American Finger-Spelling. Students will learn advanced ASL skills used in a variety of situations. The class is taught using American Sign

learn advanced ASL skills used in a variety of situ tions. The class is taught using American Sign Language. Voice and written communication are kept to a minimum. Deaf cultural studies are the thematic component throughout the course.

BGS – General Studies

### BGS 499

#### Portfolio Project

(Prerequisite: Completion of other major requirements) Students submit work from all courses within and related to their major, as well as a final creative and/or scholarly project developed with the approval of a faculty advisor. Students enroll in the Portfolio Project after completing all other requirements for the major. Grading is H, S, or U only. Course is eligible for In Progress (IP) grade.

#### BIS – Interdisciplinary Studies

#### BIS 301

#### Introduction to Interdisciplinary Studies

This course is designed to develop the mindset of a holistic thinker or inter-disciplinarian and that of a knowledge explorer, a participant observer and citizen leader in a culturally-diverse and interdependent world. The course is organized around instructional units and a number of related modules. It is based on a principle of "information-giving, information-receiving, and information-exchange." Emphasis is placed on reading, reflection, web resources and enrichment lectures, action research, writing, dialogue, and debate.

#### BIS 401

### Interdisciplinary Practice: Integrating Knowledge with Technology

(Prerequisite: BKM 301 and four additional courses from the major)

This course is a sequel to the introductory course interdisciplinary studies, BIS 301. It is the second of three course courses in the Bachelor of Arts program. It is a "how-to course" on interdisciplinary inquiry designed to provide students with an opportunity to use digital tools to explore and examine the assumptions and the relevance of connectivity between and among various disciplines on the College of Letters and Sciences. It is anticipated that the students will learn how to examine issues critically and approach problems holistically. They will also learn how to integrate the knowledge acquired in their program of study to date and create a space and a voice to demonstrate the practice of interdisciplinary.

#### BIS 499

#### Interdisciplinary Studies Project

This is an eight-week, 4.5 quarter unit capstone course that focuses on portfolio and research methodologies. It is designed to provide students

with an opportunity to integrate lessons learned from interdisciplinary portfolio-building and understand the craft of interdisciplinary research. The main course content areas include: 1) Portfolio packaging and interdisciplinary analysis on a topic as a model for students, 2) Internet research, 3) Developing an interdisciplinary research project, 4) Paper editing, 5) Constructing a sound argument, and 6) Clarifying elements across disciplinary boundaries. Grading is H, S, or U only. Course is eligible for In Progress (IP) grade.

### BKM – Business Knowledge Management

#### BKM 400

#### **Business Knowledge Management Strategies**

In the quest for sustainable global competitive advantage companies have finally come to realize that technology alone is not what sustains knowledge. Knowledge lies in your company's people, processes, and experience. The student will learn the process of conducting knowledge audits, knowledge analysis, and how to fill any knowledge gaps found through exploration and exploitation. The ability to identify tacit and explicit knowledge assets within an organization is related to how to capture knowledge, transfer it, how to share it, and how to manage it. BKM 400 provides the student with practical guidance on linking knowledge management to business strategy rather than approaching KM from a technically biased perspective.

#### BKM 600

Knowledge Management for Business Strategies An overview of the methodologies used in today's learning organization for the capture, transfer, sharing and management of knowledge. The use of technological tools and the role of Knowledge Management (KM) are discussed from the perspective of an organization's strategic goals and objectives.

#### BKM 610

#### Managerial Support Systems, DSS and ESS

An overview of the methodologies and expert system and mind mapping software used by Strategic and Middle Management to distribute a company's most valuable asset – expert knowledge, to the people that need it. The topics covered will include the mastering of the process of Mind Mapping which allows executive and strategic managers to project and modify their thoughts in a collaboration mode with other stakeholders to maximize the organization's strategic goals and objectives.

#### BKM 615

#### Knowledge Audits and Managing Knowledge Gaps

This course seeks to explain the purpose of a knowledge audit, the steps involved with identifying, evaluation and rating critical process knowledge, the various audit methods available, how to form a knowledge audit team and how to actually audit and analyze a company's existing knowledge. Furthermore, the course explores ways that knowledge gaps are best bridged and managed, including the use of both explorative and exploitative strategies.

#### BKM 620

Knowledge Integration, Transfer, and Sharing An in-depth study of the integration and transfer methods as part of a culture-based process by which adaptive organizational knowledge that lie in peoples heads is exchanged with others. The course provides a comprehensive, thoroughly up-to-date treatment of formal knowledge transfer as a basic process by which documents, data, or other types of resources is captured and stored in formats and media that allows for retrieval by others when needed in a distributed computing environment. Primary emphasis will be on the integration of tacit and explicit knowledge in an enterprise with practical focus on web-enabled multi-tiered client/server distributed computing environments within the confines of a modern Intranet and Extranet.

#### **BKM 630**

### Knowledge Repositories and Integration Methods

An in-depth study of knowledge repositories, integration methods, and systems design in a distributed computing environment. The course provides a comprehensive, thoroughly up-to-date treatment of databases, datamarts, and data warehousing in a web-enabled integrated enterprise environment. Primary emphasis will be on the integration of explicit knowledge in an enterprise and its design, analysis, and implementation. Practical focus will be placed on web-enabled multi-tiered client/server computing and the integration of legacy systems within the confines of a modern Intranet.

#### BKM 650

## Enterprise Telecommunications and Global Collaboration

Complex collaboration refers to situations where working together effectively across boundaries is critical for complex projects and problems. Complex collaboration refers to knowledge-intensive business processes that require highly interactive communication, coordination, negotiation, research and/or development. Such projects may cross disciplinary, organizational, national, and/or cultural boundaries.

Complex collaboration represents a capability that is essential to effective execution in such situations as new product development, mergers and acquisitions, joint ventures, and supply chain management, as well as large government projects. A number of issues emerge in examining complex collaboration, including: unit of analysis, critical relationships, resource development, virtual teaming, key skills, and improvement processes.

BKM 650 provides the student with an understanding of the challenges of managing such situations include ambitious schedules, conflict of cultures and practices, massive amounts of information, multiple languages, and ambiguity of roles and responsibilities.

#### вкм 670

#### Knowledge Management Design and Development

An effective organization today relies on its shared knowledge among its stakeholders for successfully arriving at the goals set in its business strategy. This course will make use of theories, processes, behaviors, and issues that allow knowledge based organizations to transform themselves in to ones that organize and share knowledge in an effective and efficient manner. The course will involve students in the design and development of a management focused system that will support knowledge management in a selected organizational setting. Students will make use of various management hierarchy as well as case-based studies that focus on the design and development of knowledge systems.

#### BKM 680

#### Prototyping and Deployment Using Project Management

An in-depth study of iterative process of prototyping and deploying knowledge management system software before, during, and after the knowledge audit and capture phase of the Knowledge Management Development Lifecycle. The course provides a comprehensive, thoroughly up-to-date treatment of the capturing, codifying, and mapping of tacit knowledge in the enterprise; applying the iterative prototyping development process for software development and integration; and the timebased deployment process using modern project management software tools. Practical focus will be placed on the use of Project Management Software

to manage the Knowledge Management Development Lifecycle.

#### **BKM 690A**

BKM Research Project – Proposal

(Prerequisite: completion of 7 core courses) This class is a capstone hands-on project, requiring students to initiate, analyze, plan, design, develop, and deliver a Knowledge Management project in the students' area of interest within the field of business intelligence. Students apply skills, principles, topics, and tools that have been taught throughout the Business Knowledge Management program to develop a specific product and/or service that could be used in a company environment today. Student's will be expected to coordinate, plan and execute a team project that demonstrates orally and in writing critical thinking skills applied in developing a product specific to knowledge management systems. Practical focus will be placed on the use of Project Management Software to manage the Knowledge Management Development Lifecycle. Grading is H, S, or Ŭ only.

#### **BKM 690B**

**BKM Research Project – Implementation** (*Prerequisite: BKM 690A*)

This class is a continuation of BKM 690A capstone hands-on project, requiring students to initiate, analyze, plan, design, develop, and deliver a Knowledge Management project in the students' area of interest within the field of business intelligence. Students apply skills, principles, topics, and tools that have been taught throughout the Business Knowledge Management program to develop a specific product and/or service that could be used in a company environment today. Student's will be expected to coordinate, plan and execute a team project that demonstrates orally and in writing critical thinking skills applied in developing a product specific to knowledge management systems. Practical focus will be placed on the use of Project Management Software to manage the Knowledge Management Development Lifecycle. Grading is H, S, or U only.

#### BRO – Broadcast Media

#### BRO 210

#### History of Television

(Prerequisites: COM 100 or COM 200 and ENG 100/101)

This course provides an overview of the history, theory and criticism of broadcast television in the United States and abroad. Students will learn about the creative and technical evolution of television, as well as investigate the social, political and cultural impact of broadcast television on 20th and 21st century society.

#### BRO 305

#### Media Storytelling

(Prerequisites: Broadcast Media Preparation Courses or Equivalents)

Media Storytelling provides the student with the basic theory, terminology, and practice essential to narrative formats in broadcast and multimedia production. Students will develop conceptual, analytical and creative writing skills necessary to produce a program "from page to stage." They will have a solid grasp of the innate narrative differences between contemporary television and multimedia formats, including fiction, nonfiction and reality television.

#### BRO 310

#### **Media Facilities Operations**

(Prerequisites: Broadcast Media Preparation Courses or Equivalents)

This course examines the structure of a professional media facility in the broadcast environment. Students survey the operational requirements and processes of the production, operations, and business departments. Topics include financing, programming, marketing and promotion.

#### BRO 320 Producing I

(Prerequisite: BRO 305)

This course provides an in-depth, practical overview of the "development phase" of a television project, including conceptualization, description, component analysis and budgeting. Students receive hands-on experience in managing the development phase of any new television program. Topics include synopsis, scene breakdown, crew assessment, and budget.

#### BRO 325

**Producing II** (*Prerequisite: BRO 320*)

This course provides an in-depth, practical overview of the "pre-production" and "production" phases of a television project. The course covers all principal tasks, goals, and pitfalls of these production phases, including creative, technical, and financial pressures at key milestones in the project. Students receive hands-on experience in managing a television project once it has been formally "greenlighted" and entered into preproduction. Topics include casting, location scouting, production board development, wardrobe and property, principal photography, postproduction, and program sale and distribution.

#### **BRO 330**

Field Production I

(Prerequisite: BRO 305)

This course is an introduction to single-camera field production for television and the roles and responsibilities of the field production team. Students learn the skills necessary for producing a taped remote video production such as news reports, interviews and informative presentations.

#### BRO 340

Studio Production I

(Prerequisite: BRO 305) This course provides is an introduction to television studio production and the roles and responsibilities of the production team staff. Topics include production design, lighting, studio camera operations, audio recording, and directing.

#### **BRO 410**

#### Broadcast Media Law and Ethics

(Prerequisites: All Broadcast Media Core Courses) This course provides an overview of the provisions of media law and ethical considerations governing the production of a television projects. The course covers all the principal legal milestones of a project, from initial title search to copyright filing and broadcast release. Students examine legal and ethical issues that effect choice of content in electronic media to gain a functional understanding of the legal rules and principles relevant to that broadcast professionals in the United States must know. Issues include the First Amendment, copyright, intellectual property, contractor relationships, licensing and the legal rights of talent and the ethical responsibilities of media producers.

#### BRO 415

#### Media Programming

(Prerequisites: All Broadcast Media Core Courses) This course provides a study of how broadcast media content is selected, managed, evaluated, scheduled and promoted to audiences and advertisers. Topics include include contemporary media channels: broadcast television and the newer media of cable, satellite, and online video.

#### BRO 420

#### **Electronic Media Management**

(Prerequisites: All Broadcast Media Core Courses) This course provides an in-depth study of topics in electronic media management, including new technology, business practices and the evolution of content delivery systems. The course covers the analytical techniques necessary to weigh business strategies and technology choices in bringing a variety of types of electronic media content to market and the management of media enterprises and projects...

#### BRO 430

#### **Field Production II**

(Prerequisites: All Broadcast Media Core Courses) Field Production II covers the advanced theory and practice of multi-camera field production. The course focuses on the planning, video taping and editing of interview, news, information and performance formats. Students learn the skills necessary for producing remote multi-camera video segments to be included in longer programs.

#### BRO 440

#### Studio Production II

(Prerequisites: All Broadcast Media Core Courses) Studio Production II is the capstone course for the Broadcast Media program. Students from the management and production concentrations work together in a multi-camera studio setting to produce a broadcast program for distribution over a variety of media outlets. Students collaborate in teams on the project from development to broadcast.

#### BTE – Bilingual Teacher Education

#### BTE 612

History and Culture of Latinos in the U.S. An examination of historical, cultural and social characteristics of major Latino groups in the U.S. Reviews the following issues: contributions Latinos have made to American society, the cultural conflict experienced by these groups, the implications of such conflict on American society and the effects of changing demographic, migration and immigration patterns. Analyzes the legal, political and social movements that influenced the social/educational status of Latinos in the U.S. Taught in language of emphasis.

#### BTE 621B

#### Reading and Language Arts Methods for Elementary Schools

(Prerequisites: TED 615, TED 621A)

This course provides Multiple Subject Candidates with research-based methods and strategies for designing and implementing a balanced and comprehensive program of systematic instruction in reading, writing and related language arts aligned with the state adopted English Language Arts Academic Content Standards for Students and the Reading/Language Arts Framework. Course content is organized into four Reading Instruction Competence Assessment (RICA) domains. Taught in language of emphasis.

#### BTE 622A

#### Curriculum and Instruction I: History, Social Science, Physical Education, Visual and Performing Arts

(Prerequisites: TED 615, TED 621A)

BTE 622A focuses on multiple subject curriculum development and teaching History, Social Science, Physical Education, Visual and Performing Arts using State of California content standards. Contentspecific teaching practices, lesson design, learning environments and assessment of student learning are emphasized to provide access to the curriculum for all students. Taught in language of emphasis.

#### BTE 622B

#### Curriculum and Instruction II: Mathematics and Science

(Prerequisites: TED 615, TED 621A) BTE 622B focuses on multiple subject curriculum development and teaching math and science using State of California content standards. Content-specific teaching practices, lesson design and assessment of student learning are emphasized to provide access to the curriculum for all students. Taught in language of emphasis.

#### BTE 624

### Content Area Literacy for Secondary and Middle Schools

(Prerequisites: TED 615, TED 623)

This course is aligned with the California Board of Education adopted academic content standards in English Language Arts and the Reading/Language Arts Framework for students who are speakers of English, English language learners (ELLs) and students with special needs and is designed to assist Single Subject Credential Candidates in developing the background and skills necessary to teach literacy in the content areas to middle/junior and/or senior high school students in the culturally and linguistically diverse classrooms in the California public schools. Taught in language of emphasis.

#### BTE 625A

### Curriculum Development for Secondary and Middle Schools

#### (Prerequisites: TED 615, TED 623)

This course integrates the California K-12 academic content standards with effective curriculum development principles for diverse learners. Through guided field activities, teacher candidates will access student background information for the purpose of designing and reflecting upon long and short term planning that enables engaged student learning and provides access to the curriculum for all learners. Taught in language of emphasis.

#### BTE 625B

#### Instruction and Classroom Management for Secondary and Middle Schools

(Prerequisites: TED 615, TED 623 and BTE 625A) This course builds on the curricular principles established in TED 625A by incorporating within a welldesigned lesson plan, instructional strategies and related classroom management principles. The class also provides strategies for dealing with unproductive student behavior. Taught in language of emphasis.

#### BTE 630A

#### **Beginning Student Teaching**

(Note: Does not grant graduate level credit) TED 630A comprises the first month of the full-day, full-time, semester-long Student Teaching experience, in which candidates are placed with certified field supervisors. Candidates must successfully complete four components in their supervised Beginning Student Teaching: (1) school-site and classroom orientation including school personnel interviews, (2) onsite classroom observations, (3) lesson plan design and presentation, each component within the context of fulfilling (4) professional responsibilities. Candidates also attend TED 629 Student Teaching Seminar, which integrates theory and practical approaches to real-life situations experienced by candidates during TED 630A.. Grading is H, S or U only.

#### BTE 630B, BTE 630C, BTE 630D Student Teaching

(Prerequisite: BTE 630A)

(Note: Does not grant graduate level credit) Student Teaching BTE 630 B, C, D comprises the second, third and fourth months of the full-day, fulltime semester-long Student Teaching experience. Candidates are placed with certified teacher supervisors and are required to successfully complete four components: (1) Classroom responsibilities, (2) lesson plan design and presentation, (3) off-site classroom observations, each component within the context of fulfilling (4) professional responsibilities.

Multiple-subject candidates spend eight weeks in both a K-2 and a 3-6 classroom (non-traditional programs may vary). One of the two assignments is with a certified Field Supervisor. Single-subject candidates experience teaching a minimum of four academic periods a day in two grade levels; a minimum of three of four periods must be in their designated academic area. Candidates complete BTE 629 Student Teaching Seminar (as begun in BTE 630A), which integrates theory and practical approaches to real-life situations experienced by candidates during BTE 630 B,C,D. Grading is H, S, or U only

#### BTE 660

#### The Bilingual Child

(Prerequisite: Passing competency test with a score of 3.5 or above in the language of emphasis)

An introduction to research, theory and practices related to the learning and development of the bilingual, bi-cognitive child. Examines theories on culture, cognition, bilingualism, bi-culturation and psychological dynamics of a positive self-esteem and academic development. Gives candidates the skills necessary to understand and assess the cognitive and linguistic developmental stages of bilingual, bicultural children. Raises consciousness and sensitivity to the effects of culture conflict on the academic achievement of bilingual children.

#### BTE 661

#### Sociolinguistics

(Prerequisites: BTE 662 and passing competency test with 3.5 or above in the language of emphasis) An examination of the development of language within the socio-cultural context. Covers the significant role of language in culture transmission and social/political control and the role of code-mixing and code-switching as a communication system in a multilingual, multicultural society and linguistic registers. Examines the social factors of language and its importance in social interaction. Also provides the necessary skills to teach in a cross-cultural and linguistically diverse classroom. Assists students in analyzing language proficiency and understanding the variations found in languages.

#### BTE 662

#### **Comparative Linguistics**

(Prerequisite: Passing competency test with a score of 3.5 or above in the language of emphasis) An examination of the structure, phonology and morphology of the language of emphasis and English. Compares and contrasts the structure of the two languages and addresses the linguistic problems in the transfer of errors from L1 to L2. Includes strategies for teaching English as a second language. Prepares candidates to understand both first and second language acquisition. Also provides candidates with the skills necessary to understand the structure and form of the two languages and to predict the transfer of linguistic problems in the transition period of language acquisition.

#### BTE 664 Advanced Theory and Research in Bilingual Education

(Prerequisite: Passing competency test with a score of 3.5 or above in the language of emphasis) A seminar in research and studies that have been conducted on bilingual students. Assesses and evaluates models of bilingual programs. Also provides an opportunity to compare and contrast research conducted on bilingual education. Students critique the strengths and weaknesses of research studies.

#### BTE 665

#### **Advanced Grammar and Composition**

(Prerequisite: Passing competency test with a score of 3.5 or above in the language of emphasis) Teaches advanced skills in composition and grammar, including writing skills, through the use of the computer lab. Provides the opportunity to use word processing programs in English and in the language of emphasis to compose and edit work. Students acquire the necessary skills to write their term papers or thesis in the language of emphasis. Taught in the language of emphasis.

#### BTE 667

#### Socio-Cultural Issues in Bilingual Education

(Prerequisite: Passing competency test with 3.5 or above in the language of emphasis)

A seminar in issues that affect the socialization and enculturation of children in a multicultural society. Examines factors that affect the learning process, the role of the teacher as a change agent and institutional change in education. Provides the opportunity to critically analyze current political and social issues that affect the bilingual classroom. Helps students develop a personal philosophy of education.

#### BTE 668

#### Survey of Children's Bilingual Literature

(Prerequisite: Passing competency test with 3.5 or above in the language of emphasis)

A survey of children's literature in both English and the language of emphasis. Provides effective strategies for fostering reading for enjoyment and understanding as well as critical skills for assessing literature for bicultural, bilingual students. Teaches a variety of ways to encourage students to read. Also gives teachers an opportunity to read and evaluate the books that are age- and grade-appropriate.

#### BUS – Business

#### BUS 480

#### Integrated Business Policy (Capstone course)

This course provides students with the opportunity to apply the principal concepts and skills learned in each of their BBA program core courses to realworld business situations. Students' ability to integrate this knowledge and to apply and articulate critical analysis to cases and other assignments are among the key objectives of this course. Students must complete at least 9 BBA preparation and upper-division core courses before starting this capstone course.

#### BUS 491

#### Internship Project

(Prerequisites: 31.5 quarter units in business or business related courses and a 2.5 GPA)

Internship Project is a supervised work experience for those students who have identified an employer offering an internship opportunity. It is designed to provide qualified applicants with practical experience, enable students to assess various career choices, advance in their careers, and apply concepts and ideas in a real-world setting. Normally, 90 hours onthe-job are needed to qualify for 4.5 quarter units. The course is scheduled for each student individually, for two academic months, but can be extended for up to six months. International students are subject to special restrictions and should consult their international student admissions advisor. Grading is H, S, or U only.

#### BUS 500A

#### Intermediate Algebra

An introduction to quantitative methods for business graduate students with no previous exposure to the subject, it covers topics including algebraic operations, equations, graphs and functions, exponential and logarithmic functions, and an introduction to linear programming. No credit is awarded.

#### BUS 500B

#### Statistics

An introduction to statistics for business graduate students with no previous exposure to the subject. It covers topics that include arranging data, constructing a frequency distribution, measures of central tendency, measures of variability, and probability distribution. No credit is awarded.

#### BUS 500C

#### Macro and Microeconomics

An introduction to economics for business graduate students with no previous exposure to the subject, it covers topics including microeconomics, macroeconomics, and an introduction to management. No credit is awarded.

#### BUS 691 Internship Project

(Prerequisites: 13.5 quarter units in graduate business course, and 3.0 GPA)

Internship Project is a supervised work experience for those students who have identified an employer offering an internship opportunity. It is designed to provide qualified applicants with practical experience, enable students to assess various career choices, advance in their careers, and apply concepts and ideas in a real world setting. Normally, 90 hours onthe-job are needed to qualify for 4.5 quarter units. Course is scheduled for each student individually, for two academic months, but can be extended for up to six months. International students are subject to special restrictions and should consult their international student admissions advisor. Grading is H, S, or U only.

#### CED – Counselor Education

#### **CED 600**

Advanced Child and Adolescent Development The counseling process, interventions, and strategies will address cultural, ethnic, issues presented in class. The course analyzes and conceptualizes human development themes from the perspective of various learning and personality theorists. Practicum experience is required.

#### CED 601

#### **Consultation in the Schools**

(Prerequisites: School Psychology students: CED610) This course introduces students to specific techniques including communication and interpersonal skills necessary towards effective consultation at the individual, group and systems levels. Emphasis is on team building and on the provision of indirect services by school counselors and school psychologists including program development, staff development, and written communication skills. Practicum experience is required.

#### **CED 602**

**Contemporary Issues in School Counseling** 

Introduces students to topical social issues related to counseling. It is meant to expose students to critical issues, their possible solutions and the most current thinking and research. Practicum experience required.

#### CED 603

**Multicultural Counseling** 

#### (Prerequisite: CED 610)

Emphasis is on the building on skills developed in the individual and group counseling course including culture conflict, personal identity, managing gender and racial issues as well as lifestyle concerns; cooping vs. personal empowerment; effective intervention models when working with ethnic and linguistic minorities including building effective parent involvement programs. Principles of effective cross cultural counseling including applicable theories, goals, skills and techniques will be reviewed. Case examples, current regulations, and issues in counseling culturally diverse students are explored. Practicum experience is required.

#### **CED 604**

#### **Orientation and Field Experience in School** Counseling (1.5 quarter units)

An exploration of the field of school counseling and its suitability as a personal career choice. Emphasis is on an understanding of the multiple roles of school counselors that includes counseling, coordination and collaboration. Field experiences, using interviews and observations will give students insight into their future vocations. Emphasis is place on oral and written communication, and observational skills. Practicum experience is required. Grading is S or U only.

#### CED 606

#### Development and Evaluation of School **Counseling Programs and Services**

This course will focus on the designing, developing, implementing, and evaluating a contemporary school counseling program in accordance with the National Standards. Foundations of school counseling programs are covered, as are results based guidance. Finally, students will learn the leadership skills necessary to implement the program and counseling services to meet needs of the community they are servicing. Practicum experience is required.

#### CED 610

#### Advanced Counseling Theories and Techniques (Prerequisite: CED 600)

An examination of the major theories of individual counseling and their application for school counselors and school psychologists. The focus is on building the theoretical knowledge and practical skills required for expert counseling. Issues of social and cultural diversity in the context of helping relationships are addressed. Practicum Experience is required.

#### CED 611

#### Group Counseling

(Prerequisite: CED 610)

Application of basic knowledge of the roles, functions, and dynamics among group leaders and group participants: covers group process theory and the research pertaining to group process; students analyze the interaction within a group. Practicum experience is required.

#### CED 612

#### **Career and Academic Counseling**

This course provides a general examination of current career development/ career education literature including theories and major concepts, career education programs and practices, resource materials, academic and career counseling skills, and the use of computerized career information systems. Practicum experience is required.

#### **CED 613**

#### Psycho-Educational Assessment

An overview of the counselor's role in the use and interpretation of individual and group assessment instruments and the implications of assessment results on instructional and support programs in schools. Diversity issues, limitations of standardized testing and alternatives to traditional assessment are explored.

#### CFD 614

Legal and Ethical Practices for School Counselors Provides an introduction to professional, ethical, legal, theoretical, and practical aspects of counseling. Students will examine the roles and responsibilities of counselors, professional organizations, and associations. Historical and social context along with emerging professional issues and directions are included. National Standards and ethical guidelines fro practice are examined.

#### **CED 616**

School Counseling Internship I CED 617 School Counseling Internship II **CED 618** 

#### School Counseling Internship II

(Prerequisites: a record of a passing score on the CBEST, completion of all program prerequisites, completion of ten(10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.)

Students are placed in a school settings ranging from elementary to high school and expected to perform a variety of counseling related activities for a minimum of 600 hours of supervised practice to be scheduled over a period of at least two months. Students must maintain a grade of satisfactory throughout the internship series. Grading is S or U only.

### **CED 619**

#### **Counseling Practicum Community College**

(Prerequisites: a record of a passing score on the CBEST, completion of all program prerequisites, completion of ten(10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.)

Students are placed in a variety of school settings and expected to perform a variety of counseling related activities for a minimum of 200 hours of supervised practice to be scheduled over a period of at least two months. Students must maintain a grade of satisfactory throughout the internship series Grading is S or U only.

#### CED 620

#### Best Practices Seminar in School Counseling (3 quarter units)

Prerequisites: students must have completed all program coursework, must be enrolled in their internship and have permission of the faculty advisor.)

Students will review the knowledge, skills, and standards of the graduate program in counseling in final preparation for their employment as professional counselors. Leadership opportunities within the counseling role are identified and developed. Students will prepare for the ETS Praxis examination, complete their program portfolios, and present their school project as part of this course.

#### CED 637

#### Action Research

(Prerequisite: ILD 625) This course is designed to provide the knowledge and skills required to generate and evaluate research relevant to various areas of professional education. The work of the educator will be emphasized throughout the course as students produce a major research and writing project. Students prepare a research proposal in their area of practice, obtain Institutional review Board (IRB) approval, conduct the study and prepare an oral and written report. Course include relevant aspects of professional writing while remaining focused on the practical needs of educators who wish to join the larger professional community in their field of specialty. This class is

scheduled for two months one day a week and at the end of that time a grade of "IP" will be posted then the maximum length of time is 10 additional months. Grading is H, S, or U only.

#### CED 694 Thesis

(Prerequisites: ILD 625 and successful completion of an undergraduate or graduate statistics course. Students must have written permission of lead faculty to enroll in the course).

This course is a supervised experience culminating in the completion of a thesis. The student prepares a research proposal, obtains Institutional Review Board (IRB) approval, conducts the study and prepares the written thesis. This class is scheduled for 2 months, meets once a week and at the end of that time a grade of "IP" will be posted then the maximum length of time is 10 additional months. Class size is limit to 5 students. Grading is H, S, or U only.

#### CEN – Construction Engineering

#### CEN 320

#### Surveying, Metrics and GIS (Prerequisite: EGR 319)

Land and topographic surveying with global position systems and geographic information systems (GIS). Fundamentals of distance, leveling angles, theodolites, transverse surveys and computations. Hands-on with ArcView GIS to understand the basic GIS concepts and applications in land planning.

#### **CEN 323**

Structural Analysis

(Prerequisites: EGR 301 and EGR 304) Introduction to analysis of wood, steel and concrete structures. Basic structural loads, forces and moments in beams, columns and trussed systems.

Internal reactions and method of sections. Stress, sheer and deformation in beams and columns. Properties of soils and foundations. Basic design fundamentals.

#### CEN 410

### **Construction Materials and Methods** (*Prerequisite: MTH215*)

An overview of the basic materials and methods utilized in construction projects. Wood, steel, masonry, glass, and concrete and other material are introduced along with their associated construction systems in foundations, framing, cladding, windows, doors, finishes and roofing.

#### CEN 413

#### **Plans and Specifications**

(Prerequisite: EGR 319)

Drawing and interpretation of plans, sections, details, symbols, notes and details in architectural, construction and shop drawings. Coordination and reference between drawings. Specification creation incorporating material properties, construction techniques and legal factors. Industry standards from AIA and CSI are presented.

#### CEN 416

#### **Mechanical and Electrical Systems** (*Prerequisite: MTH215*)

The impact of M/E systems on the design and construction process including energy considerations. Fundamentals of HVAC, plumbing, fire protection, electrical distribution, lighting, information systems, and vibrations in the building system.

#### CEN 419

#### **Estimating, Scheduling and Control** (*Prerequisites: CEN 410*)

Introduces the fundamentals of construction management, estimating, scheduling and control. Quantity takeoff estimations for material, time, equipment and overhead are presented. Activity durations, scheduling and project updating for control are covered.

#### CEN 420

### **Estimating, Scheduling, and Control II** (*Prerequisite: CEN*419)

This course builds on the fundamentals of construction management, estimating, scheduling and control introduced in CEN 419. Advanced topics concerning quantity takeoff estimations for material, time, equipment, overhead, critical path, and precedence networks for activity durations, scheduling and project updating for control are presented.

#### CEN 421

#### Construction Accounting, Finance and Law

This course applies the principles of business accounting and financial principles and engineering economics to the construction industry. Construction accounting systems, depreciation and financial analysis are introduced. Labor, overhead and profit management are presented. Concepts for cash flow for construction and the time value of money are covered. Legal aspects specific to construction industry contracts are introduced.

#### CEN 422

#### **Field Inspection and Safety**

(Prerequisite: CEN 410) Integration of safety and productivity into daily field operations through inspection and accountability. Examines accident costs and contributing factors and techniques for risk minimization. Presents the relationship between safety and quality and techni

relationship between safety and quality and techniques for site, structure, general and mechanical and electrical system inspections.

#### CEN 425

#### Design and Construction Process Integration

This course focuses on the detailed processes of construction management and the relevant tools, processes and techniques are involved. Students will be developing skills and knowledge to integrate and manage the overall construction process including the project proposal and design, cost estimate, contract document drawings and specifications, construction schedule, and project presentation.

#### CHD – Chemical Dependency

#### CHD 440

#### Drugs, Values and Society An examination of the history of substance use and abuse in the United States. Examines individual and institutional values that underpin chemically dependent behavior as well as socio-cultural factors, including media images, consumer product advertising, myths and stereotypes and subculture/life-style issues. Provides an overview of the social services structure, including outreach, education, prevention and treatment models.

#### CHD 601

#### **Drugs in American Society**

A survey course intended for a general audience with diverse interests in the phenomenon of drug use and abuse. Topics include pharmacology, history, theories of drug abuse, treatment methods, special populations, education and prevention models and ethical, political, social and legal considerations. Open to any graduate students with approval of their school except those who have completed CD 640.

#### CHD 640

#### Addictions: Contexts and Treatment

A comprehensive study of the theories, etiology, assessment, diagnosis and treatment of addictions. Also covers medical and legal aspects, education and prevention strategies; and HIV/AIDS issues for chemically dependent clients and their families.

#### CHN – Chinese

#### CHN 100

Beginning Chinese I

(Co-requisite: CHN 100A) This is the beginning course in Modern Standard Chinese (MSC). Elementary skills in the standard communication modes of speaking, reading and listening to Chinese are introduced. The course includes an introduction to Chinese characters,

#### CHN 100A

#### **Beginning Chinese I Laboratory** (1.5 quarter units)

"Pinyin" and usage of basic vocabulary.

(Co-requisite: CHN 100) This is an intensive online laboratory course in which the student interacts in a speaking and listening mode to a programmed sequence of language units. These are parallel to the corresponding materials covered in CHN 100, Beginning Chinese.

#### CHN 101

Beginning Chinese II (Prerequisites: CHN 100, CHN 100A) (Co-requisite: CHN 101A) This course is a sequel to the beginning course in Modern Standard Chinese (MSC). The course includes an introduction to the basic parts of an Chinese sentence and the basic written Chinese phrases for oral and reading comprehension.

#### CHN 101A

### Beginning Chinese II: Laboratory (1.5 quarter units)

(Prerequisites: CHN 100, CHN 100A) (Co-requisite: CHN 101)

This laboratory course involves students in the use of common Chinese terms orally in situational context. The student will be involved in oral interpretation of the basic spoken Chinese phrases. Elementary skills in the standard communication modes of speaking, reading, and writing and listening to Chinese are emphasized.

#### CHN 200

#### Intermediate Chinese I

(Prerequisites: CHN 101, CHN 101A) (Co-requisite CHN 200A) This course enhances the student's proficiency in spoken and written Modern Standard Chinese (MSC). This course emphasizes the difference between standard and dialectic spoken Chinese. Emphasis is given to both formal and informal Chinese. Grammar and vocabulary are expanded.

#### CHN 200A

### **Intermediate Chinese I, Laboratory** (1.5 quarter units)

(Prerequisites: CHN 101, CHN 101A)

(Co-requisite: CHN 200) In this course emphasis is given to both formal and informal Chinese. This course enhances the student's proficiency in standard spoken Chinese. Emphasis is given to both formal and informal Chinese. Grammar and vocabulary are expanded.

#### CIS – Information Systems

#### CIS 301

#### **Management Information Systems**

This course provides student with an overview of core concepts related to the emerging interconnections between technology, the organization, and information management.

#### CIS 310

#### Technology Project Management

This course introduces students to the foundation of project management - project integration, scope, time, cost, quality, human resources, communications, risk, and procurement. The focus is on the concepts, skills, tools, and techniques involved in information technology project management. Students will develop a project planning using Microsoft Project.

#### CIS 320

#### Systems Analysis and Integration

This course provides a comprehensive introduction to the planning, analysis, design, and implementation of contemporary information systems. Students will examine the role and responsibility of a System Analyst. Several approaches to system requirements are also covered.

#### CIS 330

#### System Development

This course introduces the Object-Oriented approach to system development with emphasis on user and computer interface design. Introduction to objectoriented programming, java, and Unified Modeling Language (UML) standard are also covered.

#### CIS 340

#### Data Communications

This course covers in detail all the critical technical areas in data communications, wide-area networking, local area networking, and protocol design. The focus is on current technology of the data and computer communications field. Emphasis is on both the fundamental principles as well as the critical role of performance in driving protocol and network design.

#### CIS 350

#### **Database Management Systems**

This course provides students with the fundamentals of database systems. An introductory approach to developing database applications; students learn to evaluate a business situation and then build and design a database application. The focus is from systems design to distribution and integration of the system through hands-on experience. Core theories and ideas of database management are also covered.

#### CIS 416 Database

#### **Database Administration** (*Prerequisite: CIS 340*

Designed to give the Oracle database administrator (DBA) a firm foundation in basic administrative tasks. Through instructor-led learning, structured hands-on practices and challenge-level exercise labs, the DBA will gain the necessary knowledge and skills to set up, maintain and troubleshoot an Oracle7 or Oracle8 database.

#### CIS 420A

Information Systems and Technology Project I (Prerequisite: CIS 310 – Technology Project Management, and 80 percent of courses in the major, except CIS 420B) A precursor to the final IS/IT product development capstone course. Students research their area of interest and learn how to apply project management tools in the preliminary development process of their final project product. Grading is H, S, or U only.

#### CIS 420B

#### Information Systems and Technology Project II

Prerequisite: CIS 420A A capstone hands-on project in the student's area of interest. Students apply skills learned, principles, topics and tools that have been taught throughout the program to develop an IS/IT specific product. Grading is H, S, or U only.

#### CIS 425

#### Programming for Information Technology Environment

This course provides students with an introduction to programming concepts in an integrated computing environment. It also examines contemporary programming design techniques including event-oriented approaches. Students develop applications using Microsoft Visual Basic in a graphical user interface (GUI) environment.

#### CIS 430

#### Web and E-Business Design and Development

This course focuses on two aspects of website management: technical and business aspects. An introduction to Web languages and technologies is made with some in-depth coverage of HTML and CSS. How to manage people, content, and suppliers is covered in the business focus.

#### CIS 440

#### Systems Quality Assurance

This course provides students with the fundamentals of measuring an organization's system quality and ways to improve it. This cover also covers the testing process and how to staff and execute a test plan from start to finish.

#### CIS 450

#### Information and Systems Assurance

This course provides students an understanding of how to audit information systems, including enterprise systems, fraud and fraud detection. The combination of text and software create a double learning environment in which students will gain an understanding of how these audits take place in the real world.

#### CIS 460

#### Human Factors and Ergonomic Design

This course introduces students to methods that incorporate human capabilities and limitations, environmental factors, human-machine interaction, and other factors into system design. The focus is on the interface between humans, technology, and systems. Human factors and ergonomics in systems analysis, design, and evaluation will also be examined.

#### CIS 470

#### **Computer Forensics**

This course provide students with an introduction of computer forensics in networked systems, this course provides the students with an understanding of technical issues in acquiring computer evidence with emphasis on computer forensic analysis. File systems and current computer forensics tools are also examined.

#### CIS 480

#### Health Information Management

This course provides an overview of the health information management and health care delivery systems. Coverage includes the patient record, numbering and filing systems, record storage and circulation, indexes, registers, and health data collection.

#### CIS 601

### Information Systems Strategies, Policies and Ethics

An in-depth analysis of strategies, policies and ethical issues facing the Information Systems manager in today's business organization. This course also explores the merger of information Systems with legal, ethical, cultural, human resources, business philosophies and organizational structures. Through lectures, readings, case analysis and projects the student will learn the strategic role IS professionals play in the modern work-place environment. Through analysis, and projects the student will learn the strategic role telecommunications plays in the modern work place, networked environment.

#### CIS 602

#### **Network Services and Protocols**

(Prerequisite: CIS 601 or approval of lead faculty) An in-depth study, from a managerial perspective, of the principles and applications of telecommunications in organizations. Examination of voice, data, analog and digital transmission in local area and wide area networks will be explored and the related existing and emerging communications protocols. Through lectures, readings, case analysis and projects the student will learn the strategic role telecommunications plays in the modern work place, networked environment.

#### CIS 603

#### Database Management for Decision Support Systems

(Prerequisite CIS 601 or approval of lead faculty) An overview course in the development, deployment and management of decision support systems and its components. Topics covered will include relational database management systems, the planning, design, implementation, documentation and maintenance of DSSs following standard methodologies. Through lectures, readings, case analysis and projects the student will learn the strategic role decision support systems play as a pivotal tool in the modern work place for executive decision-making and strategic planning.

#### CIS 604

### Organizational Management and Information Systems

(Prerequisite: CIS 601 or approval of lead faculty) An in-depth study of organizational management, network infrastructures and information security in the modern organization. Topics covered will include information risk analysis, threats, vulnerabilities and protection methods in the business enterprise. Through lectures, readings, case analysis and projects the student will learn how to analyze a business enterprises information management security risks and vulnerabilities and prepare a comprehensive security plan for Intranet, Extranet and Internet infrastructures.

#### CIS 606

#### **End User Information Systems**

(Prerequisite: CIS 601 or approval of lead faculty) An in-depth study of the end-user approach to systems analysis, addressing the links between information systems technology, people and organizational goals. The course provides a comprehensive, thoroughly up-to-date treatment of IS design, analysis and implementation, with a practical focus on shaping information systems to enhance employee performance and carry out "real-world" business strategies. There is a strong emphasis on workgroup (collaborative) technologies, knowledge management and change leadership.

#### CIS 607

Systems Integration and Client/Server Computing (Prerequisite: CIS 601 or approval of lead faculty) An in-depth study of information systems technology through systems integration and distributed computing, to maximize efficiencies to meet organizational goals. The course provides a comprehensive, thoroughly up-to-date treatment of IS design, analysis and implementation, with a practical focus on client server computing and the integration of legacy systems with newer applications to meet changing business needs.

#### CIS 608

#### Knowledge Management – Knowledge Based Systems

(Prerequisites: CIS 601 or approval of lead faculty) An in-depth study of decision support systems, inclusive of knowledge based systems, expert systems and artificial intelligence and its practical application in the organization. The course provides a comprehensive, thoroughly up-to-date treatment of IS design, analysis and implementation, with a practical focus on shaping information systems to enhance executive decision making to meet the changing internal and external environment facing business's today. There is a strong emphasis on data mining, knowledge management and management decision tools and skills.

#### CIS 609

#### Automated Knowledge Management Systems (Prerequisite: CIS 608)

An in-depth study of knowledge management through project implementation. The course provides a comprehensive hands-on application of business systems analysis, database integration and creation of decision support systems. There is a strong emphasis on individual and team project development using the acquired knowledge and skills from previous courses. This class represents a cumulative effort of acquired learning.

#### CIS 620A

#### Master's Research Project I

(Prerequisite: Completion of all program core requirements with a GPA of 3.0 or better)

This course is the first part of the master's research project. It focuses on the research and selection of an appropriate topic related to information systems. Students develop the project in a three-to-five member group and utilize skills previously acquired in their respective core curriculum. This is a regular one-month course. Grading is H, S, or U only.

#### CIS 620B

#### Master's Research Project II

(Prerequisite: Completion of CIS 620A) Two-month course, meets once a week.

A continuation of CIS 620A. Students develop the project in a three-to-five member group. Students complete a detailed analysis and design of the project within the first two weeks of the course. After completing the project, students formally present their final product to a review panel for evaluation and grading. Grading is H, S, or U only.

#### CJA – Criminal Justice Administration

#### CJA 400

Gangs in America

Exposes students to the basic trends of criminal behavior as it relates to gangs in America and the causative and contributory factors of gang behavior. It explores the general personality, intellectual and social perspectives of criminal behavior as it relates to gangs.

#### CJA 401 Criminal Intelligence

Exposes students to the basic trends of criminal intelligence as it relates terrorism around the world. The focus will be on the domestic and international threats of terrorism and the basic security issues that surround terrorism today. The student will gain an understanding of terrorism and the many factors that support and drive the terrorist movements throughout the world. The students will also analyze the laws and special forces which nations within the international community have created to meet this challenge. This course also presents an overview of computer crimes and the use of the internet to disrupt computer services throughout the world. The student will learn about emerging laws and digital solutions to block the use or spread of digital crimes or terrorism.

#### CJA 429

#### Introduction to Policing

This course is designed to provide the student with a basic understanding of the role of the peace officer in American society. The course will examine the steps in selecting candidates for the position of police officer, the complexity of the enforcement requirement, the challenges that face peace officers each day, the limitations placed on peace officers by all three branches of government at both the state and federal levels.

#### CJA 431

#### Criminology

This course exposes the students to the basic tenets of criminal behavior, the causative and contributory factors of behavior. It explores the general personality, intellectual and social perspectives of criminal behavior.

#### CJA 434

#### Survey of Forensic Sciences

An introduction to the forensic sciences. Includes topics such as forensic photography, firearms and tool mark identification, the examination of questioned documents, hair and fiber analysis, serology, instrumental analysis, forensic pathology and odontology and forensic psychology.

#### CJA 437

#### The Juvenile Offender

A study of the nature and control of juvenile delinquency. Examines patterns of delinquent behavior, factors of causation, juvenile law and the juvenile justice system. Students also learn policies and procedures in treatment and prevention.

#### CJA 440

#### Corrections

An introduction to the field of corrections and the corrections continuum. Topics include contemporary theories of punishment, corrections and rehabilitation, local, state, federal and military confinement facilities and community alternatives to incarceration.

#### CJA 441

#### Organized and White Collar Crime

This course will expose the students to elite and corporate deviance, the incidence and prevalence of white collar and organized crimes. The course explores the theoretical foundations of all types of occupational crimes, with a comparative, analytical global look at these crimes. It also exposes the students to the forms and causes of these crimes, the legal and law enforcement and societal responses to such crimes.

#### CJA 443

#### **Current Issues in Law Enforcement**

Using a seminar approach, this course focuses on current specific problems and issues within the law enforcement community. Topics may include police morale, the retention of sworn personnel and future trends in law enforcement.

#### CJA 446

#### Criminal Justice Management and Leadership

An analysis of the organization and management of criminal justice agencies. Discusses principles of supervision and motivation of personnel, management problems and solutions, decision-making and administration of policies and procedures.

#### CJA 448

#### Violence and Society

An exploration of methods, patterns and meanings of individual and collective violence. Focuses on gangs, terrorists and the assaultive individual. Students analyze the causes of violence, attitudes toward violence and methods of controlling violence as well as the impact of gun control.

#### CJA 449

#### **Research Methods**

An introduction to conducting research in criminal justice-related fields. Students learn how to identify current problems in criminal justice, develop a practical research question, formulate hypotheses, identify appropriate resources to answer the research question and describe an appropriate research method to answer the research question.

#### CJA 451

#### Court Systems and the Judicial Process

A study of concepts and theories regarding the utilization, organization and management of the judicial process. Critically reviews the issues of fair trial, speedy trial, free press, calendar control, judicial responsibility and new technology. Students analyze the roles of the legal actors, problems of lower, trial and appellate courts and the distribution of judicial powers.

#### CJA 452

#### **Criminal Law and Procedure**

A survey of jurisprudential philosophy and case study of common law and statutory crimes. Discusses historical development, theory, principles and functions of criminal law. Also covers elements of due process, rule of law and the role of the constitution in protecting rights.

#### CJA 456

#### **Criminal Evidence**

A study of the elements of criminal law as applied to various theories of criminal evidence to enhance understanding of the various issues facing prosecutors, criminal justice practitioners and law enforcement agents. This course will explore the application of evidentiary issues and its relationship to investigations and criminal conduct.

#### CJA 457

#### Minorities, Crime and Social Justice

A review of the criminological literature and theoretical applications of the law and criminal justice as seen from a racial, gender specific, class and ethnic orientation.

#### CJA 460

#### Principles of Investigation

An introduction to the practices and procedures involved in conducting civil and criminal investigations. Topics include learning about crimes and their elements, modus operandi, major goals of investigations, primary functions and responsibilities of investigating officers/agents and the investigator's relationship with other individuals and agencies involved in an investigation.

#### CJA 464

#### **Constitutional Law for Criminal Justice**

A study of the fundamentals of the U.S. Constitution, the rights and protections of the accused; an exploration of the case law and the judicial system, the rights and responsibilities of the police and citizenry

#### CJA 465 Practicum in Criminal Justice

(1.5-9 quarter units) A practicum designed for students seeking field experience in law enforcement. Students receive academic guidance from criminal justice faculty and supervision at the field placement site. Typically, the practicum requires students to work a minimum of 100-150 hours under supervision. At the completion of the practicum, students are required to write an in-depth research paper about their experiences during their placements with coordination and support from their faculty advisor and field supervisor. Units are arranged and determined based on assignment and number of hours prearranged at the placement site. Grading is S or U only.

#### CJA 467

#### International and Domestic Terrorism

CJ 467 exposes the students to the basics of terrorism and its global impact; terrorism investigation and intervention strategies. It describes the factors to be considered when implementing psychological, social, investigative and legal techniques against terrorism and its related crimes.

#### CJA 470

#### Supervised Criminal Justice Senior Project (Prerequisite: CJA 449)

Supervised senior project undertaken by students of criminal justice when they have completed all core courses in the program. Coordinated by full-time faculty and chaired by a criminal justice faculty member chosen by the student from previous courses taken within the program. Students select a committee and a viable topic in criminal justice to research and then meet with a committee member once a week for two months. Upon completion, students present their project to the committee, other faculty and peers in an open forum. Grading is H, S, or U only. Accelerated study is not permitted with CJA 470. CJA 470 is two months in length. Students who do not complete the Senior Project within the two-month period are eligible, at the discretion of the instructor, to receive a grade of "IP". This allows the student up to one year to complete the project (from the start date of the class). Students who do not complete the project within one calendar year from the start date of the class will need to retake CJA 470. No grade of "I" can be given for this course.

#### CJA 490

#### Guided Study

(1.5-9 quarter units) Individual study under direction of instructor. Requires prior approval of appropriate academic department. Grading is by H, S, or U only.

#### CLD – Cross-cultural, Language and Academic Development (CLAD)

#### CLD 627

#### Methodology for Cross-Cultural Instruction (CLAD Certificate Course only)

(Prerequisites: Possession of a credential approved by the California Commission on Teacher TED 621A or TED 623)

An examination of content-area instruction for English language learners. Covers strategies that foster English Language Development (ELD) lesson development, adaptation, and delivery. Also covers Specially Designed Academic Instruction in English (SDAIE) and "instructional scaffolds" as well as "instructional conversations" to support ELD.

#### CMM – Community

#### CMM 200

**Community Outreach, Advocacy, Organization** The purpose of this course is to teach potential community healthcare workers the strategies for com-

munity organizing and mobilization. It will conclude topics on the most current practices in legislative advocacy and the techniques for ethical approaches in advocacy. Basic concepts and strategies for community organization will be taught. The community healthcare worker will be trained to be a supporter rather than a mere catalyst.

#### CMM 210

#### **Complementary and Alternative Medicine**

This course introduces the student to other forms of interventions and treatment which may not be embraced by conventional Western medical standards. It will analyze the effectiveness of each therapy and how each of these therapies can be used to treat health conditions and diseases. Common conditions affecting different age groups will be discussed including the benefits and risks of the different Complementary and Alternative Medicine.

#### **CMM 220**

#### **Environmental and Occupational Hazard**

This course will include a study of common environmental and occupational hazards and diseases. Identification and evaluation of risk factors that will protect the individuals and the community from potential harm is part of the course. It will prepare the student to assess detrimental results of exposure to health hazards. Strategies for prevention and policy development will be emphasized.

#### CMM 230

Issues in Death, Dying and the Human Experience This course provides a basic background on historical and contemporary perspectives on death and dying. Attention is given to current American practices regarding death, as well as cross-cultural interpretation. Emphasis is placed on the special situa-tion of the terminally ill and bereaved and introductory concepts on counseling.

#### CMM 240

#### Health Promotion and Lifestyle Modification

Health is defined as the absence of disease and a harmonious balance of the physical, emotional, social, spiritual and intellectual aspects. This course is designed to promote health through lifestyle modification and management. A healthy individual is the precursor of a healthy community. The course also includes topics on wellness, guidelines for nutritional intakes and the significance and impact of health benefits across ethics, ages and gender groups.

#### CMM 250

#### Spanish for Healthcare Professionals

The course will provide basic Spanish communication skills to healthcare practitioners. Emphasis will be placed on the comprehension and proper usage of medical, diagnostic and procedural terminology as it relates to patient care and education. Knowledge of ethnical and medical beliefs and cures will be briefly discussed to understand client's reactions and decisions.

#### COH – Community Health

#### COH 300

#### Introduction to Community Health

(Prerequisite: Preparation for the major courses) Focus is on an introduction to community health including foundation, health care delivery, and environmental health and safety. Health of selected groups of individuals will be discussed including women, infants and children, adolescents, the elderly, minorities, and other groups

#### COH 310

#### **Culture and Health**

Focus is on the influence of culture on illness, health, and rehabilitation. The relationship that culture plays in the health and wellness of both individuals and the community in which they live will be explored.

### COH 315

### Introduction to Epidemiology

Focus is on an introduction to traditional and modern epidemiology. Key concepts, biostatistical approaches, and disease concepts will be explored. Case studies and real-world applications will be included

### COH 320

#### **Controlling Communicable Disease** (Prerequisite: COH 315)

Focus is on surveillance procedures, outbreak investigation, vaccines, and infections such as tuberculosis, influenza, food poisoning, hepatitis, HIV and sexually transmitted disease and hospital acquired infection.

#### COH 370

#### **Alternative Healthcare**

Focus is on providing an understanding of complementary and integrative therapies. The historical context and theoretical basis as well as the most recent scientific research and clinical applications will be explored. The most prevalent complementary therapies in use today will be discussed.

#### COH 380

#### Introduction to Program Planning and Evaluation

Focus is on planning, program development, and evaluation in community health. Emphasis is on health promotion and health and human services. Community assessment, needs assessments, setting priorities implementation of services and evaluation will be explored.

#### COH 400

#### **Environmental Health**

Focus is on the foundations of environmental science and environmental issues. Global climate change, agriculture, biodiversity, resource management, environmental toxins, waste management, and other topics will be explored.

#### COH 420

#### Health Needs of Vulnerable Populations Focus is on population groups that are most vulnerable to disease and injury in the United States including homeless persons, refugees and immigrants, people living with AIDS, alcohol and sub-stance abusers, high-risk mothers and infants, victims of family or other violence, and the chronically or mentally ill.

#### COH 425

#### Health and Safety

Focus is on health and safety management in the workplace. Emphasis is on how to protect employees, reduce illness and injury on the job, and develop a safety culture. OSHA required training, inspections, and postings and labeling will be explored.

#### COH 494

#### **Community Health Capstone Project**

(Prerequisites: Completion of 50 quarter units of required coursework)

This two-month capstone project undertaken by community health students when they have completed the core courses in the program provides an opportunity to practice and implement strategies learned in the program. Students will also design and participate in a collaborative service learning experience in a community health setting. Students will complete the portfolio of their work from core courses and revise as needed to create an impressive final portfolio that can be used. Students who do not complete the project within the two-month period are eligible to receive a grade of "I" with a maximum of a one-time, six-month extension. Grading is H, S, or U only.

#### COH 600

#### Foundations of Community Health

Focus is on community/public health and understanding health and provides concepts and tools for work with populations. The role of the government

at the local, state and federal level will be discussed. An introduction to emergency preparedness, environmental and occupational health, epidemiology, health education, and other aspects is included.

#### COH 610

#### Global Health Issues

Focus is on the most important health issues facing the world populations. International health will be explored as it relates to health in the United States.

#### COH 615

**Program Planning** Focus is on the PRECEDE-PROCEED model for health promotion. Exploration of health promotion in communities, occupational, educational, and health care settings will be explored.

#### COH 620

#### Nutrition in Promoting Health

Focus is on community nutrition, state and federal legislation, marketing, managing and mentoring personnel, nurturing women and children and services to the underserved.

#### COH 625

#### **Epidemiology and Biostatistics**

Focus is on preventive medicine, public health epidemiology and biostatistics. An integrated approach that stresses the interrelationship among these areas and clinical relevance will be explored.

#### COH 630

#### **Environmental Health Sciences**

Focus is on environmental health including global issues such as climate change and wars to regional issues such as air, water, transportation, and energy to local issues such as food safety, pest control, and occupational health.

#### COH 635

#### Marketing Community Health

Focus is on strategies and campaigns to change individual and community behavior. Social marketing strategies will be explored including the planning process, evidence-based research, delivering the message, working with partners and promotional material and activities.

#### **COH 640**

#### **Health Communication**

Focus is on communication of health risk and risk behaviors and the empowerment of individuals in decision-making. Ethical issues, use of new technologies, and effective risk communication will be explored.

#### COH 660

#### Health Policy, Planning and Evaluation

Focus will be on health policy and evaluation including cost containment, health insurance, managed care and other issues.

#### COH 665

#### Issues in Community Health

Focus is on issues in community/public health including transport, tobacco, nutrition, infectious diseases, and waste disposal among others.

#### COH 670

Research Capstone Project (Prerequisite: HED 680 Community -Based Research) Two month course meets once a week. Students' work on an original and significant project that integrates concepts, principles, and evidence based strategies taught throughout the program. Students design, implement, and evaluate an evidence-based health program designed for a community. Grading is H, S, or U only. Course is eligible for an In Progress (IP) grade.

#### COH 685

#### Internship in Community Health

(Prerequisite: Must be taken as one of the last 2 courses in

#### the program of study)

The internship will be 90 hours of field experience utilizing the knowledge and skills learned in the program. The experience will be in a community agency. Students will be under contract with a University approved preceptor for their internship in community health. Students will complete the portfolio of their work throughout the program and revise as needed to create an impressive final portfolio that can be used. Grading is S or U only. Course is eligible for an In Progress (IP) grade,

### COH 694

Thesis

(Prerequisites: HED 680 Community-Based Research and either an undergraduate or graduate statistics course) Two month course meets once a week.

This is a supervised experience culminating in a thesis. Maximum length of time is 12 months. Grading is H, S, or U only. Course is eligible for an In Progress (IP) grade.

#### COM – Communications

#### COM 100

#### Introduction to Communication

An examination of the cultural, linguistic and institutional factors that shape the mediated messages of contemporary society. even the most everyday communications.Students learn the history, business, and genres of books, magazines, newspapers, radio, television, and the Internet. Through readings and viewing assignments, course projects, this course introduces students to semiology, rhetorical analysis and mass media theory, practice, and social effects..

#### COM 200

#### Effective Communication

An introduction to the principles and practices of spoken communication, with special emphasis on the skills needed to communicate effectively in the workplace. Topics include platform techniques, interpersonal communication strategies, cross-cultural approaches and small group methods.

#### COM 220 Media Literacy

Media Literacy is the ability to access, analyze, evaluate and communicate information from a variety of media forms. In this course, students investigate message design strategies, the effects of media consumption and information fatigue on human behavior, and how bias and economic forces influence media presentations. Course topics include meaning construction and matching, information authentication, the effects of visual and rhetorical structures on interpretation and the effects of media convergence on message distribution and reception

#### COM 360

### **Representation and Diversity in the Media** (*Prerequisites: ENG 100*/101)

An exploration of the ways in which popular media represents our diverse and dynamic culture. The course focuses particularly on images and narratives of race and gender on television, in the movies and in popular culture. It also examines the cultural forces that influence how such representations are produced and perceived, their political and behavioral consequences, and various methods for analyzing and critiquing popular media.

#### COM 380

#### **Democracy in the Information Age +** (*Prerequisites: ENG 100/101*)

This course offers Aa critical examination of the distribution of information and power in modern democracies. It covers the various theories of democratic participation and media responsibility and how they are measured against contemporary practices around the world. It explores the effects of such developments as television "news," popular access to video and electronic technologies, and global electronic networks on contemporary political and cultural discourse.

#### COM 385

### **Tale, Text and Hypertext** (*Prerequisites: ENG 100/101*)

This course is an introduction to the range of theories analyzing the evolution of linguistic communication technologies, from oral communities, to written and computer-based social organizations. It examines the consequences of these developments for culture, literature, science, politics, pedagogy and identity. Students will learn about Pays particular attention to the uses and effects of networked texts and hypertexts and social and personal media, including blogs, vlogs, chats, wikis, IM, and texting. Includes a project where students prepare hypertexts that can be "published" on the Internet.

#### COM 422

#### **Technical Writing and Presentation** (*Prerequisite: ENG* 334A)

An advanced workshop for technical writers, that applies the principles covered in COM 200 and ENG 334A specifically to technical presentations for nontechnical audiences. Focuses on writing styles appropriate for user manuals as well as oral presentations and offers training in platform skills, audiovisual techniques and other strategies needed to make technical information understood by business managers, end-users and the public.

#### COM 490

Independent Study

(1.5-4.5 quarter units) (Prerequisite: Approval of Instructor and Department Chair)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

#### COM 600

**Communication Skills in the Global Environment** The basis of writing, presentation, and content creation is an understanding of the communication situation. Students study theories and practice of interpersonal communication in the workplace, focusing on the ability to communicate with other people with whom they have professional interactions. The course also covers intercultural communication to give learners tools for encoding and decoding verbal and nonverbal messages in interactions with people from diverse backgrounds. Finally, students will study the development of interpersonal and professional relationships between people with different cultural backgrounds

#### COM 605

#### **Content Distribution Processes and Technologies**

An examination of how different types of media channels - mass, social, personal, and direct media are used by organizations to disseminate messages to internal and external publics. The mass media include newspapers, magazines, motion pictures, and broadcast TV and radio. The social media, enabled by the Internet, are social networking sites, blogs, vlogs, wikis, swarms and hives. Personal media, enabled by mobile personal devices, are IM, texting, and location-based messaging. Direct media include postal mail, email, and telemarketing. The Internet itself is a hybrid, incorporating elements of all media types because it has the capacity to carry all types of messages and message formats. Students will learn how companies select specific media to distribute messages, including costs, processes, and content management, formatting, and mass personalization of content packages.

#### COM 610

#### Integrated Marketing Communications

Integrated Marketing Communications (IMC) refers to a process for creating and fostering rewarding relationships with customers and publics through strategically controlling or influencing all messages sent to these groups and encouraging purposeful dialogue with them. The course teaches students how to effectively integrate all marketing communication elements within an organization. Through case analysis and an examination of real-life examples, students will learn how IMC has become critical to the marketing function in an organization.

#### COM 615

#### Integrated Marketing Communications Research

This course gives learners a thorough grounding in integrated marketing communications research, a key element of all IMC efforts, guiding the planning, execution, and evaluation of such programs. This course focuses on the identification of organizational strategic visions, objectives, and communication needs. It then covers qualitative and quantitative research methodologies, secondary research, internal market intelligence systems, and data analysis. Students gain practical experience with these methods to identify and reach audiences and publics, to learn about them and their needs for message iterative message development, and to track results of the IMC program. Finally, students learn how appropriate research strategies will allow them to develop and implement appropriate communication programs to fulfill organizational goals.

#### COM 620

#### **Crisis Communications and Management**

This course provides learners with principles and procedures for handling multiple stakeholders and publics under crisis conditions. Students are trained to deal with the media in less-than-optimal situations, when they may be faced with indifference or even hostility. They will study the strategies and tactics of organizations that have dealt with crises, providing a rich texture of what to do – and what not to do. Knowing what to do in a crisis is a valuable skill to any employer; knowing what to do before a crisis will help students prepare an organization for unexpected events.

#### COM 630

#### Communications Program Measurement and Evaluation

Students need to understand how to evaluate the effectiveness of strategic communications programs while they are in progress and after they have been completed. Increasingly, organizations require that such evaluations take place using rigorous research rather than by the receipt of anecdotal reports or examination of press clippings. This course presents techniques for measuring and conducting research to evaluate the effectiveness of a communication program, including procedures for conducting communication audits.

#### COM 640

Persuasion and the Content Creation Process Learners will explore theories of persuasion that guide the preparation of messages intended to influence others. They will learn about content development and creative and production processes. The course will provide opportunities for hands-on development and production of PR and advertising materials so that students' ability to manage these processes will be based on their own experience.

#### COM 650

#### Legal and Ethical Issues in Professional Communication

This course provides students with a clear understanding of the legal environment for public communications and the ethical considerations that must be taken into account. They will learn about international regulation of copyright and intellectual property protection, the federal legal and regulatory provisions in the U.S., and will explore legal systems of other countries that are relevant to their potential practice geographies. Ethical issues are equally important to organizations in the public sphere, and learners will gain skills of assessing ethical risk and establishing and following ethical guidelines.

#### COM 660

#### Capstone Project

The Capstone Project is the culmination of the skills the learner has acquired in the Strategic

#### CSC – Computer Science

#### CSC 200

#### **Orientation to Computer Science** (Prerequisite: none)

This is an introductory computer science survey course covering current developments and future prospects in the field. The course uses a breadth-first approach to the field of computer science. Coverage begins with the fundamentals of computer architecture and progresses to software and software development processes. Topics included are operating systems, networking, programming languages, soft-ware engineering, database systems, and ethical issues in computing.

#### CSC 208

#### Calculus for Computer Science I (Cross-listed and equivalent to MTH220) (Prerequisite: MTH 215)

This course focuses on the differential and integral calculus of function of one variable with applications. Topics include limits and continuity of functions, origin and definition of the derivative, stan-dard rules of differentiation including chain rule, exponential and logarithmic forms, curve sketching using derivatives, origin and definition of anti-derivative; indefinite integrals, standard integration rules including substitution and by parts, coverage of Fundamental Theorem of Calculus and a brief exposure to numerical integration. Students may not receive credit for both CSC 208 and MTH 220.

#### CSC 209

### Calculus for Computer Science II (Prerequisite CSC 208)

This is the second course in a two-semester series on calculus with emphasis on understanding of concepts and developing problem solving techniques and strategies. Topics include integration of trigonometric functions, functions of several variables, partial derivatives, multiple integrals, convergence of series and sequences, and a brief introduction to differential equations. Calculus techniques are used in finding areas, volumes, arc length, and surface area. Further applications in the areas of series approximation, continuous probability and random variables, and modeling are discussed and examined

#### CSC 220

#### **Applied Probability and Statistics** (Prerequisite: MTH 215)

Introduction to the theory and applications of probability and statistics. Topics include fundamental concepts of probability, conditional probability, random variables, common distributions, and statistical inference (estimation, hypothesis testing, and regres-sion). The emphasis is on developing problem solving skills and applying key results to computing and engineering problems such as algorithm analysis, queuing, and simulation.

#### CSC 242

#### Introductions to Programming Concepts and Methods

#### (Prerequisite CSC 200, CSC 208)

Introduction to modern programming design techniques using C++. A study of basic programming constructs, techniques and fundamental control structures. Emphasis is on Object Oriented and modular programming. Coverage includes data types, functions, arrays and pointers. The course examines problem analysis, decomposition and modern programming paradigms and methodologies.

#### CSC 252 Programming in C++ (Prerequisite CSC 242)

This class is a continuation of CSC 242 in that it will reinforce and add to the methods and materials learned in CSC 242. This course covers the fundamentals of Object-Oriented Programming in C++ including class definition and object instantiation, inheritance and polymorphism. Detailed coverage of exception handling, operator overloading, I/O and file streams, templates, and the Standard Template Library (STL). Exposure to Data Structures and basic algorithms for sorting and searching.

#### CSC 262

#### Programming in Java (Prerequisite: Math 215)

The course introduces the Java programming language and its features. Topics include introduction to object oriented programming, basic control structures, java graphics and GUI objects, multimedia components, exposure to event driven programming, arrays and strings in java. Coverage includes encapsulation, inheritance, and polymorphism.

#### CSC 300

#### **Object Oriented Design and Analysis** (Prerequisite: CSC 252)

This course presents the key concepts and methodologies required to perform quality object-oriented design evaluation and development with particular attention to practical techniques such as use-case, CRC analysis, UML diagrams and patterns. The course emphasizes the most practical analysis and design methods, including domain analysis, class identification and relationship between the classes. The Unified Modeling Language (UML) is presented in detail and is used in the exercises and case studies. Special emphasis is given to the use of object patterns in developing software systems.

#### CSC 310

#### Linear Algebra and Matrix Computation (Prerequisite: CSC 208)

The course includes the study of vectors in the plane and space, systems of linear equations, matrices, determinants, vectors, vector spaces, linear transformations, inner products, eigenvalues and eigenvectors. The course will approach the study of linear algebra through computer based exercises. Technology will be an integral part of this course. The computer algebra system MATLAB will be used throughout the course. Students will also develop experience applying abstract concepts to concrete problems drawn from engineering and computer Science

#### CSC 331

### Discrete Structures and Logic (Cross-listed and equivalent to MTH 325) (*Prerequisite: CSC 252, CSC 310*)

A theoretical foundation for computer science. Introduction to topics such as sets, propositional logic, Boolean algebra, counting techniques, recursive equations and solution techniques, graph algorithms with application to trees. Introduction to mathematical proofs. Students may not receive credit for both CSC 331 and MTH 325.

#### CSC 335

#### **Data Structures and Algorithms** (Prerequisite: CSC 300, CSC 331)

An overview of data structure concepts, arrays, stack, queues, trees, and graphs. Discussion of various implementations of these data objects, programming styles, and run-time representations. Course also examines algorithms for sorting, searching and some graph algorithms. Algorithm analysis and efficient code design is discussed.

#### CSC 338

Algorithm Design (Prerequisite: CSC 335) This course presents an introduction to the techniques for designing efficient computer algorithms,

# **Course Descriptions**

proving their correctness, and analyzing their running time complexity. General topics include asymptotic behavior, solving summations and recurrences, algorithm design techniques such as divide-and-conquer, dynamic programming, and greedy algorithms applied to sorting, searching and graphs. The course includes an introduction to the theory of parallel and distributed algorithms

#### CSC 340

#### Digital Logic Design

(Prerequisite CSC 200, CSC 208) This course provides a solid foundation in design and analysis of the operation of digital gates. Course covers design and implementation of combinational and sequential logic circuits and information storage circuits. Concepts of Boolean algebra, Karnaugh maps, flip-flops, registers, and counters along with various logic families and comparison of their behavior and characteristics such as fan-out, rise and fall times and delay are presented. This course prepares students for the study for computer architectures and organization.

#### CSC 340L

#### Digital Logic Design Lab (1.5 quarter units)

(Prerequisite or co-registration: CSC 340) A study of basic digital logic circuit design and implementation. Circuit schematic development and computer modeling and simulation of digital systems. Experiments explore designs with combinational and sequential logic. Students work through design activities, which include testing, troubleshooting and documentation.

#### CSC 342

#### **Computer Architecture**

(Prerequisite: CSC 340 and CSC340L) An examination of advanced hardware design, analysis, and low level programming with emphasis on the structure of the machine. In addition, the machine cycles and instructions, pipelining, addressing modes, and architecture concepts are covered. Includes assembly language programming and program control structure

#### CSC 350

#### **Computer Ethics**

An analysis of the values, ethics and ideologies in computing and their applications to current issues in computer industry within the contemporary sociocultural setting. Focuses on ethical decision-making in computing matters. Through lectures, case study, debate and readings, students are helped to develop an ethical outlook on a wide variety of workplace issues in computing.

#### CSC 400

#### **Operating System Theory and Design**

(Prerequisite: CSC 335)

An introduction to operating system concepts including implementation, processes, deadlocks, communication, multi-processing, multilevel memory management, file systems, protection, resource allocation, and scheduling.

#### CSC 421

#### Compiler Design

(Prerequisite: CSC 335) An introduction to the theory of programming language processors focusing on lexical analysis, syntax analysis, and compile-time mechanics, including code generation and optimization, execution of interpretive representations, and management of data structures.

#### CSC 422

#### Database Design (Prerequisite: CSC 300)

A survey of principles, structure, analysis, and techniques of database design and implementation. Topics include physical and logical design, normalization, database models, security, and integrity.

#### CSC 430

#### Programming Languages

(Prerequisite: CSC 300)

A comparative study of programming languages. Syntax, semantics and pragmatics are considered. Language features that support software engineering are emphasized. Recent trends in programming language design and type theories are studied.

#### CSC 436

#### **Computer Communication Networks**

(Prerequisite: CSC 335)

An in-depth study of fundamental concepts in the design and implementation of computer communication networks. Coverage of core problems such as framing, error recovery, multiple-access, flow control, congestion control, routing and end-to-end reliability. Topics include basics of switched communication networks, packet switch architecture, TCP/IP networking, routing algorithms, network programming, Quality-of-Service networks, and wireless communications. Mathematical tools are applied in quantitative modeling and analysis of networks.

#### CSC 440

Advanced Programming in Java (Prerequisite: CSC 262)

A treatment of advanced programming techniques in Java using abstraction,

encapsulation and inheritance. Development of applets and applications using client server technology, multithreading, event-driven programming techniques, and multimedia.

#### CSC 445

#### Wireless Technologies and Application Development

(Prerequisite: CSC 242 or CSC 262)

A look at the current wireless technologies and communication protocols. This will include the current and emerging applications, wireless and mobile infrastructure, devices, middleware, and network access issues. Examines the impact of wireless application on organizations. Students will learn about the current tools, and techniques employed in development of mobile software solutions.

#### CSC 450

#### Artificial Intelligence

(Prerequisite: CSC 335)

An introduction to problem solving using modern artificial intelligence techniques. Examines the role of heuristics in problem solving. Concepts such as agents, production systems, and natural language communication are studied. Experimental artificial intelligence systems are developed.

#### CSC 451

#### Artificial Intelligence Programming

(Prerequisite: CSC 335)

A study of artificial intelligence programming techniques. The role of heuristic programming in pattern matching and search problems is examined. Introduction to intelligent agents, and decision game trees. Implementation strategies for computing systems underlying the concepts such as, production systems, heuristic search and natural language communication are examined.

#### CSC 452

#### Human Computer Interactions

(Prerequisite: CSC 300)

An introduction to human-computer interaction models. A study of the techniques used in humancomputer interface systems. Graphical User Interface systems and natural language processing will be considered.

#### CSC 454

**Computer Graphics** 

(*Prerequisites:* CSC 310, CSC 335) A study of the fundamental mathematical, algorithmic and representational issues in computer graphics, with emphasis on 3 dimensional graphics. Examination of topics including the graphics process, projective geometry, homogeneous coordinates, projective transformations, line-drawing, surface modeling and object modeling using spatial sampling and parametric functions, approaches to rendering, texture synthesis and mapping, and polyhedral representations.

CSC 455 Game Programming

(Prerequisite: CSC 454) A study of tools and techniques for design and implementation of interactive games. The course will emphasize programming aspects, including event loops and execution threads, rendering and animation in 3D, terrain/background representation, polygonal models, texturing, and collision detection.

#### CSC 456

#### Advanced Game Programming (Prerequisite: CSC 455)

An advanced study of formal models and design principles of interactive games. The course will emphasize algorithms, models, programming techniques, including event loops and execution threads, rendering and animation in 3D, terrain/background representation, polygonal models, texturing, and collision detection.

#### CSC 480A

#### **Computer Science Project I**

(Prerequisite: Completion of core courses) A study of the software development life cycle. Emphasizes logical organization of system and communicating design through documentation suitable for generating a concrete implementation. Students construct an original project with practical applications applying software engineering concepts. This project includes program specifications, test plans, and user documentation. Grading is H, S, or U only.

#### CSC 480B

#### Computer Science Project II

(Prerequisite: CSC 480A)

A continuation of the student project. Student teams complete the internal specification and test plan. The project is coded, modules-tested, system tested and all documentation is completed. Grading is H, S, or U only.

#### CSC 610

#### **Mathematical Foundations**

A study of mathematical models of computation and theoretical foundations of computer science. Proof techniques, automata theory, Chomsky hierarchy, decidability and computational complexity are emphasized.

#### CSC 630

#### **Operating Systems**

A study of relation between architectures and system software. Topics include process and memory management issues, multiprogramming, timesharing, multiprocessing, inter-process communication, synchronization, distributed systems and real time systems. Resource allocation, computer security and related problems are considered. Scope and limitations of current Operating Systems.

#### CSC 640

#### **Database Systems**

Design and implementation of database and knowledge based systems are studied using various data models, principles, structures, analysis and modern techniques. Topics include physical and logical design, normalization, security, integrity and models such as relational, entity-relationship, object oriented and semi-structured models. Scope and limitations of current database models.

#### CSC 650

#### Programming Languages

(Prerequisite: CSC 610 or permission of the instructor) A study of programming language syntax, semantics and pragmatics. Principles of data types and structures are discussed. Programming language design and implementation issues are emphasized Scope and limitations of programming language theories will be studied.

#### CSC 655

#### **Compilers and Interpreters**

(Prerequisite: CSC 610 or permission of the instructor) A study of design and development of programming language translators, including lexical analysis, syntax, semantics, code generation and optimization. Scope and limitations of compiler theories will be studied.

#### CSC 660

#### Artificial Intelligence

(Prerequisite: CSC 610 or permission of the instructor) A study of problem solving using modern artificial intelligence techniques. Examines the role of knowledge in problem solving. Concepts such as agents, search, production systems and natural language communication are studied. Experimental artificial intelligence systems are developed. Scope and limitations of artificial intelligence theories will be studied.

#### CSC 670

#### User Interface Engineering

(Prerequisite: CSC 610, SEN 620, CSC 630, CSC 650 or permission of the instructor)

A study of techniques in design and implementation of user interfaces. Emphasis will be on effective human computer interaction strategies that meet human cognitive capabilities and organizational practices and processes.

#### CSC 686

#### **Computer Science Project I**

(Prerequisite: Completion of all MSCS core courses or permission of the instructor)

A study of the software development practices. Emphasizes logical organization of system and communicating design through documentation suitable for generating a concrete implementation. Students construct an original project with practical applications utilizing software engineering concepts. This project includes requirements engineering, design, test plans and user documentation. Grading is H, S, or U only.

#### CSC 687

#### **Computer Science Project II**

(Prerequisite: CSC 686) Two-month course, meets once a week.

A continuation of the student project. Student teams complete the project in this phase. The project is coded, module-tested, system-tested and all documentation is completed. Grading is H, S, or U only.

#### DAF – Department of Defense Architectural Framework

#### DAF 601

#### Architecture Framework Basics

DoDAF Framework background, history, and planned evolution, government regulations, uses of architecture, framework philosophy, concepts and definitions, review of the DoDAF six step process, products overview and relationships, details of government regulations and reporting requirements, case Studies, comparison with other frameworks and methods, and overview of Universal Reference Resources for the DoD Framework.

#### DAF 602

#### **Core and Supporting Products**

Overview of each of the 40 core and supporting products and their relationships from each of the DoD architecture framework views (operational, systems and technical). Understanding of how to model each of these products and to how to inte-

grate them into a viable DoD Architecture Framework for different DoD functions, organizations, programs and operations. Each of these products represents a different type of model. Students learn how to create each product and use EA DoDAF specified tools.

#### **DAF 603**

#### Enterprise Architecture Planning

Introduces the concepts and theories associated with organizational strategic planning as the basis for enterprise architecture, provides an examination of the Federal Enterprise Architecture Program Management Office reference models, how to define business architecture utilizing business strategy, goals and objectives, the technological environment and external variables including location, organizational culture and strategic business planning. Provides an understanding of how to plan and man-age an EA project within an enterprise, including development of a statement of work, scheduling, requirements analysis, risk management, the role of security and information assurance, and the formulation of architectural principles.

#### DAF 604

#### Advanced Architecture Modeling and Analysis

Overview of the supporting products and their rela-tionship(s) to the core products and to each other; operational, systems and technical view for supporting products overview, data and activity modeling, LISI, TRM/JTA, security, CADM, XML and DoD Technical Reference Model (TRM) and Joint Technical Architecture (JTA).

#### DAT – Database

normalized database.

#### **DAT 600**

Database Theory, Modeling and Design This course introduces the history of databases and the development of database theory and modeling. The course explores the hierarchical, network, relational, object oriented and semantic models. Students read and respond to database theories, such as those offered by Dr. E. F. Codd. Students

compare modeling methods and tools and design a

#### DAT 610

#### Database Implementation and Maintenance (Prerequisite: DAT 600)

This course explores database best practices for implementing and maintaining efficient databases. Students implement a comprehensive database using one of the standard modeling techniques, building expertise in designing and implementing data-driven business applications using hands-on exercises. Students learn how to maintain databases using database administration and management techniques.

#### DAT 620

Structured Query Language (Prerequisite: DAT 610)

This course teaches the skills for implementing and maintaining databases using Structured Query Language (SQL) commands, including Data Design Language and Data Manipulation Language commands. Topics include creating databases using Transact-SQL and Data Transformation Services (DTS) to manipulate data; programming business logic using stored procedures, triggers, user-defined functions, and views; optimizing database performance by using SQL Profiler and the Index Tuning Wizard; and implementing security.

#### **DAT 630**

**Database Programming** 

(Prerequisite: DAT 620) This course teaches advanced skills for managing databases using Structured Query Language features. Students learn to write advanced queries using JOIN statements and client-side reports, imbedded SQL such as T-SQL or P-SQL, as well as command line operations. Students learn to use programming techniques within SQL to build databases designed for web-based deployment.

#### DAT 640

#### **Database Administration and Security** (Prerequisite: DAT 630)

This course teaches the skills for administering data resources including managing database users and roles, database maintenance plans, Data Transformation Services, security policies and procedures and documentation. Students learn to design policies comparable to the International Standards Organization and Homeland Security information security standards, and learn how to use encryption and decryption to protect data.

#### **DAT 650**

#### Database Disaster Recovery

(Prerequisite: DAT 640)

This course teaches the skills for protecting corporate data resources. Topics include database security, backup and restoration, replication, disaster planning and recovery, and business continuity. The course also explores organizational liabilities and vulnerabilities resulting from such legislation as Sarbanes Oxley and HIPAA regulations. Students learn to design security comparable to the International Standards Organization and Homeland Security information security standards.

#### DAT 660

#### Enterprise Data Management (Prerequisite: DAT 600)

This course teaches students the enterprise data model and related best practices used in Enterprise Resource Planning (ERP) endeavors, such as SAP, PeopleSoft, and Oracle. This course enables students to learn how to transform "data silos" that inhibit data sharing into enterprise data that facilitates data sharing and strategic planning. Students will learn the major obstacles to achieving ERP success.

#### DAT 670

#### **Enterprise Business Intelligence**

(Prerequisite: DAT 660) This course teaches skills for designing a business intelligence plan to retrieve organizational data for competitive advantage. Particular emphasis will be placed upon developing adequate scope and setting appropriate goals and expectations for BI projects.

Topics include Data Warehousing and Mining, Knowledge Management, and Business Intelligence.

#### DAT 680 Database Web Technologies (Prerequisite: DAT 630)

The most successful technology companies are ones who successfully deploy web-based database technologies. This course teaches the skills for dynamically displaying data resources in a browser-based environment. Topics include HTML, Internet Information Server (IIS), Microsoft.NET Platform, ASP.NET, ODBC, ADO.NET, and XML. The students learn how to create interoperable native web services.

#### **DAT 690 Emerging Data Technologies** (Prerequisite: DAT 680)

Database technology will continue to evolve in fastchanging technical environment. This course explores the most recent innovations in database science and technology. By exploring emerging trends, the student will obtain skills for recognizing fundamental shifts in technical and market forces, providing a level of organization safeguard in a rapidly changing technical world.

#### DAT 691

Database Research Project I (Prerequisites: Successful completion of nine of the ten

core MSDBA courses.) A graduate capstone project for Database Administration majors. Students work on an original and significant project that integrates concepts, principles and tools that are taught throughout the program. Students research and learn how to apply database management in the development of their final senior capstone projects. This is a one-month course. Grading is H, S, or U only.

#### **DAT 692**

#### Database Research Project II

(Prerequisite: DAT 691)

Two-month course, meets once a week. A graduate capstone project for Database Administration majors. Students work on an original and significant project that integrates concepts, principles and tools that are taught throughout the program. Students research and learn how to apply database management in the development of their final senior capstone projects. This is a two-month course where students meet once a week for eight weeks. Grading is H, S, or U only.

#### DEN – Design Engineering

#### **DEN 408**

#### **Computer Aided Engineering I: Simulation** Modeling and Analysis

(Prerequisite: EGR 319)

Introduction to simulation modeling and analysis, model development, intermediate and detailed modeling, modeling issues and techniques.

#### DEN 411

#### Computer Aided Engineering II: ProEngineer Modeling Software

(Prerequisite: EGR 319)

Introduction to the powerful computer aided design package ProEngineer 2001 for mechanical design applications, modeling and analysis

#### **DEN 414**

#### Computer Aided Engineering III: LabVIEW Graphical Programming

(Prerequisite: EGR 319)

Introduction to the LabVIEW essential techniques for designing virtual instrument configurations and controls.

#### **DEN 417**

#### **Computer Aided Engineering IV: Graphics and** GUI with MATLAB

(Prerequisite: EGR 319)

Introduction to the industry-standard engineering language provided by MATLAB latest versions for computation, analysis, and visualization, with emphasis on engineering graphics applications.

#### **DEN 420**

#### Computer Aided Engineering V: SolidWorks 3D Mechanical Design Tools

(Prerequisite: EGR 319)

Introduction to the three-dimensional parametric modeling tools, features and functions supported by the latest version of the SolidWorks software with emphasis on mechanical design solutions, standards and techniques.

#### **DEN 423**

#### Human Factors in Engineering and Design Consideration of human characteristics in the requirements for design of the systems, products and devices. Human-centered design with focus on human abilities, limitations and interface.

#### **DEN 426**

**Reliability Engineering** (Prerequisite: MTH 215)

An introduction to reliability engineering with emphasis on practical applications and the mathe-matical concepts. Cover mechanical, electronic and software failure mechanisms, design and testing.

#### DEN 429

#### Product Design Optimization

(Prerequisite: MTH 215)

This course focuses on analytical and empirical tools that allow designers and manufacturing engineers to predict the manufacturing and assembly cost estimates for optimized design.

#### DEN 432

#### Concurrent Design of Products, Manufacturing Processes and Systems

(Prerequisites: MTH 210, EGR 307)

An introduction to the concepts, methodologies and practices of the concurrent engineering design environment for effective and efficient integration of products, systems and manufacturing processes.

#### **DEN 435**

#### Design and Analysis of Experiments

Introduction to the concepts of making the design and analysis of engineering experiments more effective and efficient. Coverage includes advanced techniques to analyze experimental results, Taguchi's robust design strategy, combination designs, and Qualitek-4 software for automatic experiment design and analysis.

#### DHH – Deaf and Hard-of-Hearing

#### DHH 600

Introduction to Bilingual Education of Learners Who Are Deaf or Hard-of-Hearing: Theory and Practice

This one-month course is an overview of professional, legal, and ethical practices including educational policy and perspectives. Critical examination of historical backgrounds, philosophies and theories and their relationships with assessment, curriculum, instructional, and learning pedagogy to meet individual and collective learners' academic and social equity needs are addressed. Emphasis will be on the meaning of effective communication and collaborative partnerships with and through administrators, professionals, community members, families, and learners from diverse backgrounds. Cultural pluralism and multiliteracy development as well as sociological and psychological challenges that may arise will also be discussed.

#### DHH 601

Signed Language Acquisition and Development This one-month course will investigate the diverse communication needs of congenitally deaf and hardof-hearing infants and young children. This course will also focus on the signed communication development of older children, youth and late-deafened school age individuals who are deaf or hard-of-hearing. Consideration is given to children with deaf parents who use signed communication and children with hearing parents who use signed communication. The course will include an overview of research regarding children who use a variety of signed systems, and deaf and hearing children who acquire American Sign Language as a first language and English as a second language. Students will apply a bilingual ASL-English framework to the challenge of developing comprehensible basic interpersonal communication as well as cognitive academic language proficiency in a visually accessible environment.

#### DHH 602 Written and Spoken Acquisition and Development

This one-month course will investigate the diverse communication needs of congenitally deaf and hardof-hearing infants and young children. This course will also focus on the written and spoken communication development of older, youth and late-deafened school age individuals who are deaf or hardof-hearing. Consideration is given to children with deaf parents who use written and oral communication and children with hearing parents who use written and oral communication. The course will include an overview of research regarding deaf and hearing children who acquire spoken English as a first language. Students will apply a bilingual ASL-English framework to the challenge of developing comprehensible basic interpersonal communication as well as cognitive academic language proficiency in a visually accessible environment.

#### DHH 603 Assessment of Learners who are Deaf, Hard-of-Hearing or Deaf with Special Needs

In this two-month course, prospective teachers of learners who are deaf or hard-of-hearing will acquire skills in qualitative and quantitative assessment. Students will learn to collect data through observational methods, as well as through traditional testing, to determine baseline cognitive and communicative abilities. Students will complete a comprehensive case study, a variety of screening projects which require "hands on" use of observational, formal and curriculum-based measures. Fundamental to the course are issues of cultural and linguistic diversity and the role of families in the assessment process. Students will apply Piagetian theory, along with a Multiple Intelligences framework, to identify cognitive and communicative strengths and needs in infants and school age children who are deaf or hard-of-hearing.

#### DHH 604

#### Development of Literacy with Learners Who Are Deaf or Hard-of-Hearing

In this two-month course, prospective teachers of learners who are deaf or hard-of-hearing will learn about various strategies for developing literacy, reading and writing. They will examine in depth the Workshop Model and how it is integrated into all classrooms, not just those for Deaf and hard-of-hearing children. Students will become familiar with ways to determine the reading level of students who are Deaf or hard-of-hearing and how to build on the student's skills to improve making meaning of text. Students will link State Standards to the development of lesson plans for all parts of the literacy block. They will practice editing written pieces done by Deaf students and then planning learning experiences based on the student work. They will also develop a plan for addressing two languages, ASL and English, as part of the literacy block.

#### DHH 605

#### Teaching Deaf Learners with Additional Special Needs

This one-month course will equip prospective teachers with the necessary tools to assess and develop instruction plans for children who are deaf-blind and deaf with other special needs. The course is designed to meet the standards of the California Commission on Teacher Credentialing and the national Council on Education of the Deaf.

#### DHH 606

#### Curriculum and Instruction in Programs for Deaf and Hard-of-Hearing Learners

This seminar is devoted to an in-depth examination of the theories and practices involved in assessment, thematic curriculum design and learning pedagogy. It is also devoted to a consideration of the possible uses of narratives, critical dialogue, and writings in educational settings. The methods to be studied involve: critically contextualizing, facilitating the telling and the writing, and developing expertise in interweaving students' prior knowledge with thematic curriculum design and learning pedagogies with and through individual and collective learners' needs. This supports the development of multiliteracy and cultural pluralism approaches to meet diverse learners' intrinsic motivations, strengths, social needs and content interests. Cultural, cognitive, communication and community development theories will be the heart of this ongoing critical dia-logue among seminar participants. The focal active learning approach to the seminar will be on collaborative discussions, training with emphasis on current research skills, putting theories into practice

and constant learning through experimentation and constructive feedback.

#### DHH 607

### Bilingual – Multicultural Education of Deaf and Hard-of-Hearing Learners

This one-month course will focus on understanding the cultural and linguistic diversity that exists within the deaf community. A broad anthropological definition will be used to interpret culture through a variety of identities, such as ethnicity, gender, and hearing status, to which deaf people relate. Content will include information regarding the experiences of deaf persons from non-signing, non-English speaking families. Students will become familiar with the literature on multicultural issues from the perspective of a person who is deaf and will learn to design curriculum that considers the diverse cultures represented by the students whom they will teach. Field experiences and guest lectures will help students discover parallels between bilingual ASL-English deaf culture and the culture of deaf persons from trilingual-multicultural backgrounds.

#### DHH 608A

Student Teaching I The first month of a the full day, full-time supervised student teaching experience with learners who are deaf, hard-of-hearing or deaf with special needs. Students will participate in public day or residential classes for learners who are DHH for a minimum of 150 supervised contact hours for the first portion of student teaching as required for the Education Specialist credential. Candidates work with credentialed Master teachers providing special education services in programs for deaf and hard-of-hearing students. Grading is S or U only.

#### DHH 608B

#### Student Teaching II

The second month of a the full day, full-time supervised student teaching experience with learners who are deaf, hard-of-hearing or deaf with special needs. Students will participate in public day or residential classes for learners who are DHH for a minimum of 150 supervised contact hours to total 300 supervised contact hours with completion of part I and II of student teaching as required for the Education Specialist credential. Candidates work with credentialed master teachers providing special education services in programs for deaf and hard-of-hearing students. Grading is S or U only.

#### DHH 608I

#### Supervised Teaching for Interns (Deaf and Hardof-Hearing)

(Prerequisities: All other coursework in the Level I Deaf and Hard-of-Hearing internship credential program) This course is designed to provide a final evaluation and assessment of the National University teacher intern that takes place at the end of the coaching cycle. This supervised teaching experience with learners who are deaf and hard-of-hearing or deaf with special needs takes place after the intern candidate receives a minimum of four months of mentorship and support from a University Support Provider/Mentor and a local Intern Site Support Provider. Candidates work within their own classroom providing special education services to students who are deaf and hard-of-hearing or deaf with special needs. Grading is S or U only.

#### DHH 609

#### Student Teaching Seminar

#### (3 quarter units)

This course integrates theory and current research findings to situations encountered in the student teaching experience. Mentor teachers, student teachers and various members of the professional community will share successful teaching strategies and discuss solutions to challenges that occur in the classroom. Interns will receive guidance in the preparation of Professional Portfolios. Grading is S or U only.

#### DSM – Domestic Security Management

#### DSM 401

#### Survey of Domestic Security Management

A survey course reviewing the history, current practices, and trends in the management of domestic disaster operations. The course discusses the responsibilities different levels of government (federal, state, and local) and agencies have with respect to domestic disasters and their relationships with the private sector.

#### DSM 420

#### Information Security

A survey of one of the fastest growing international crime problems. Cyber-terrorism has been quick to emerge as an enormous threat to national security and economy. This course exposes the students to the domestic, local, national and international effects of cyber-terrorism. It provides information on the categorizations of computer criminals based on the purposes and spheres of their activities.

#### DSM 430

#### Land Borders, Seaports and Airport Security

A study of the substantial vulnerability of the nation's land borders, ports, inland waterways and airports to underwater and aviation related attack. This course educates students regarding operations underwater and at airports and enhances the knowledge necessary to identify, prevent, respond to, and recover from major catastrophes at our nation's borders and ports.

#### DSM 440

#### **Crisis Response Planning and Management**

A study of incident assessment and methods that determine to what degree a crisis is unfolding and then develop a strategy to manage the consequences of the crisis. This course provides students with the knowledge of how local, state, and federal agencies come together and interact in different crisis scenarios.

#### DSM 444

#### Disaster Management

A survey course that discusses the management areas of policy, planning, coordination, response, response management, and recovery during emergencies and/or disasters. This course focuses on defining and analyzing the role of managers in critical situations. Identifies critical incidents as any natural or man-made event, civil disturbance, or other occurrence of an unusual or severe nature that threatens to cause or causes the loss of life or injury to citizens and/or severe damage to property. Identifies the extraordinary measures to protect lives, meet human needs, and achieve recovery.

#### DSM 470

#### Legal Issues of Security Management

A study of criminal and civil liability issues concerning government and private entities while preventing acts of terrorism, or during the recovery process after a critical incident. Exposes students to new congressional laws that apply specifically to homeland and domestic security. Delves into the protection of individual rights explaining the legal background and methods to avoid the pitfalls of liability. Covers legal issues in First, Fourth, Fifth and Eighth Amendments, and how the U.S. Constitution can be applicable to both government and private entities and the responsibilities of each.

#### DSM 475

#### Techniques of Interviewing and Interrogation

Provides students with proven techniques which apply to both accusatory and non-accusatory interviews. Students develop skills in preparing for the interview and interrogation with emphasis on planning and strategies. Provides a basic format and fundamentals of specialized interviewing and interrogation methods for those who have little or no experience in this phase of an investigation. Studies one of the most specialized and difficult phases of law enforcement or security investigation-interrogation.

#### DSM 490

#### Supervised Senior Project

(Prerequisite: Students must have fulfilled all General Education, Core Courses, and Elective Courses requirements prior to beginning this course.) Supervised senior project undertaken by students once they have completed all core courses in the program. Coordinated by the assigned instructor and chaired by a domestic security management faculty member chosen by the students from previous courses taken within the program. Students select a committee and a viable topic or problem statement related to domestic security to research or solve and then meet with the instructor in a classroom environment once a week for two months. Upon completion, students present the project to the committee, other faculty, and peers in an open forum. Grading is by H, S, or U only. Course is eligible for an In Progress (IP) grade.

# ECE – Early Childhood Education

#### Children: Prenatal Through Middle Childhood

Introduction and overview of early childhood development from conception through early childhood. Focus will be on the biological, physical, cognitive, social, moral, emotional and behavioral aspects of healthy child development. Emphasis will be placed on major historical and theoretical frameworks and perspectives of child development with consideration of gender and current cultural issues. Special stress will be placed on developmental implications for effective and educational practice.

#### ECE 210

#### **Child, Family, School, and Community** (*Prerequisites: PSY 100 and ECE 201*)

Focus is on the interaction and influence of home, family, school and community on the development and growth of a young child. Emphasis is on understanding socialization processes; influence of family, school, peers, religion, and media, as well as poverty, domestic violence, and substance abuse, on developmental domains of young children. Importance will be placed on the inquisitive young child, a nourishing and positive home environment, a resourceful community and an appropriate developmental preschool program in which young children flourish

#### ECE 310 Cultural Pluralism: Impact on Early Childhood Development and Education

Focus is on introduction to culture and its impact on early childhood development and education. A study of emerging cultural pluralism and how it has transformed American society in terms of children, family, education and community will be undertaken. Emphasis will be placed on how cultural pluralism has caused the academic community to revisit educational learning outcomes and alter its strategies and techniques

#### ECE 312

#### Infant and Toddler Care

(Prerequisites: ECE 330 and ECE 430) Focus is a on the study of infants and toddlers, ages 0 to 3, with emphasis on the principles of social, emotional, cognitive, language, and physical development. The importance of close, caring relationships in a cultural context of the child and family in settings of group care will be stressed along with identification of special needs, individual needs and parent partnerships. Theories and current issues of health, safety and nutrition will be reviewed along with an analysis of licensing regulations and CDA Competency Standards for Infant and Toddler Child Development Specialists.

#### ECE 314

#### **Creative Experiences with Infants and Toddlers** (*Prerequisite: ECE 312*)

Focus is on identifying age appropriate creative experiences for infants and toddlers in a group setting. The study of language development as it influences all areas of learning and development will be discussed Establishing a positive learning environment, positive relationships with parents, history and trends in infant and toddler care, and program management will be emphasized. Theories and current issues of health, safety and nutrition will be reviewed along with an analysis of licensing regulations and CDA Competency Standards for Infant and Toddler Child Development Specialists. Theories and current issues of health, safety and nutrition will be reviewed along with an analysis of licensing issues and CDA Competency Standards for Infants and Toddler Child Development Specialists.

#### ECE 330

Early Cognition (Prerequisites: ECE 201, ECE 210, HED 220 and ECE 310)

An inquiry to the nature and tasks of early cognition including the social, cultural, and biological foundations of early cognitive development (from prenatal through age eight).

Particular attention will be paid to recent brain research regarding individual differences, learning theory, psychological theories and research on various aspects of cognitive development. The major themes common to the understanding of nature and nurture, theory of mind, memory, language, assessment models, cultural representations and academic development are explored with relevance to early childhood education. Legislation and its impact on curriculum choices for young learners are surveyed.

#### ECE 410

#### Language Acquisition and Emergent Literacy (Prerequisite: ECE 330)

Focus will be on the developmental aspects of literacy as they relate to emergent literacy skills in the young child. Particular attention will be paid to the research based relationship between language development and key language experiences that contribute to successful literacy acquisition. Students will have an opportunity to analyze children's oral language and emerging reading/writing skills in order to develop age appropriate activities that foster literacy acquisition. Particular attention will be paid to the importance of addressing the needs of all students in increasingly cultural and linguistically diverse classrooms. The role of community and parental involvement in the development of early literacy skills will be addressed.

#### ECE 415

### Emergent Curriculum: Designing Curriculum Units for Children

#### (Prerequisite: ECE 330)

Focus is on essential elements of emergent curriculum design. Students will examine ways to create integrated, meaningful curriculum units that are aligned with the National Association for the Education of Young Children (NAEYC) program standards and build on young children's personal interests and prior knowledge. Students will develop an understanding of key elements of curriculum by developing curricula units that include writing of goals and outcomes; identify age appropriate activities that actively engage young children; and include age appropriate assessment measures. Particular attention will be paid to integrating the arts across content areas. Community and family involvement will be stressed.

#### ECE 420

#### Nature, Numbers and Technology for Teaching Young children

(Prerequisite: ECE 330)

Focus will be on the identification, design and delivery of developmentally age appropriate experiential learning experiences that encourages active math,

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science and technology inquiry in young children. Exploration and inquiry related to the young child's emerging notions of mathematical and scientific processes will be the basis for developing and designing age appropriate activities that present children with opportunities to construct knowledge using age appropriate technology as a strategy in this process. Students will have an opportunity to assess young children's existing ideas relative to mathematical and scientific processes, then develop and deliver learning activities based upon this knowledge. Identification of ways to integrate subject matter across disciplines as well as opportunities to include the family and community in the learning process will be highlighted.

#### ECE 430

#### Play as Pedagogy (Prerequisite: ECE 330)

Focus is on play which offers rich opportunities to create a teaching and living-learning environment that stimulates, nurtures, and develops creativity and imagination in the inquisitive minds of young children. Emphasis is on understanding that play is closely tied to the development of the five (5) domains: physical health, well-being, and motor development, social-emotional development, approaches to learning, language, literacy and communication, and cognitive and general knowledge. This includes cognition, enhancement of motor skills, perceptual abilities, emotional growth, social awareness, skills and competence, creative problem solving, cooperative and collaborative skills, and moral and ethical behavior. Identification of classical and current perspectives of play, emergence and development of play, ways in which young children use play to understand their reality, major settings in which play occurs, inclusive play and attributes of an optimal play environment will be discussed.

#### ECE 435

#### Music, Movement, Drama and Dance

Music, movement, drama and dance as a meaningful and integral part of a dynamic learning curriculum for young children are highlighted. Content topics focus on supportive historical background (Froebel, Montessori, and Pestalozzi) and developmental perspectives (Piaget, Erikson, Vygotsky, and Gardner). The educational value in the use of the creative arts in enriching and enhancing learning domains of children is addressed. Most important are guiding classroom exercises designed to assist early childhood teachers in developing their skills in their key role as facilitators participating in age appropriate creative music, movement, dance and drama experiences. Blending subject matter into these creative experiences and integrating them into the early childhood curriculum will be highlighted. Candidates will explore, experiment, and experience the use of environmental materials to create musical instruments, turning a story into dramatic play, and improvise activities to accompany creative arts activities

#### ECE 440

#### Participant Observations of Young Children for Assessment and Curriculum Planning

(Prerequisites: ECE 330 and ECE 415) Focus will be on acquiring knowledge about informal and formal developmental screening assessment instruments for young children, how to select, and use the appropriate one to determine initial information that will facilitate individual learning environments and strategies. Students will enhance their observational skills, assessment abilities, and communication reporting to families, teachers and other professionals. Emphasis will be on the selection, administration, scoring, interpretation and reporting of results obtained from developmental screening assessments of young children to determine their skills, abilities and achievements for the purpose of planning and implementation appropriate programs, designing learning environments, and, when necessary, adapt programs and environments for children with special needs and challenging behaviors. Students will be exposed to case studies and participate in innovative pedagogical techniques such as role playing, role reversal, video tapping, and simulations to demonstrate their developing observational skills and assessment abilities.

#### ECE 445

#### Meeting Challenges in a Dynamic Learning Environment: Effective Strategies in Guiding Behavior in Children

(Prerequisites: ECE 330, ECE 415, and ECE 430) This course provides an overview of the many different challenging behaviors present in the classroom and effective strategies for meeting these challenges. Teaching strategies related to challenging behaviors will be viewed from the perspective of early childhood development within a social and cultural context. Course topics and content will include a review of learning and developmental theories, as well as a look at the roles both curriculum and teacher beliefs can play in contributing to and preventing challenging behavior in the classroom. Effective strategies, including but not limited to the use of guidance principles that support active learning, differentiated instructional practices that support diverse learning needs, including Specifically Designed Academic Instruction in English (SDAIE), and ways to include the child's community, will be covered. A field work component is included in the coursework.

#### ECE 446

#### Literature and the Young Child: Read Alouds and Story Telling

A survey of literature for young children in preschool through first grade. Emphasis on effective read aloud and storytelling strategies for developing language and listening skills, for developing concepts of print and vocabulary, and for fostering a love of reading and early literacy skills

#### ECE 450

#### Seminar/Practicum in Early Childhood Education

(Prerequisite: Student must have successfully completed all core courses with an average grade of "C" (2.0) or better in the core and have approval from his/her faculty mentor.)

Students participate in a collaborative experience at a designated community site and in an academic seminar. The academic seminar will meet once a week, for a two-hour session for a period of four weeks while the collaborative experience will occur at the designated site for nine hours per week for a period of four weeks. Approved sites will be in a head start or a preschool setting. Specific activities will include, but are not limited to, onsite observations, screening assessments, lesson plan designs and implementation, attend parent conferences, and other professional responsibilities. Students must participate in and complete degree program assessment instruments. All students must, with instructor approval, make arrangements for their practicum experience. Grading is S or U only.

#### ECE 460

#### Administering Early Childhood Programs

Management and administration of early childhood programs includes providing a quality program; working with parents, staff, volunteers, and the board; hiring, supervising and evaluating staff; designing staff development; planning for staffing, materials, equipment; developing a budget; and conducting and interpreting evaluations of the early childhood program.

#### ECE 461

#### Intentional Leadership and the Art of Supervision Emphasis will be on theoretical and practical methods for facilitating the professional development of adults in an early childhood setting. Focus will be on the importance of collaboration among staff, and between supervisors and staff, with special attention to issues of power, diversity, and communication style. The course aids students in looking at their

own professional growth from a perspective of ethical and moral accountability as a program director or teacher responsible for the well-being and development of young children.

#### ECE 462

#### Financial Management and Resources

Focus is on financial and budgeting resources used in early childhood programs. Emphasis is on federal, state, local resources as well as private funds, fund raising and grant writing which will support an effective child development program. The course includes the financial policies and procedures used in public and private programs. Provide necessary skills to effectively manage budgets, resources, and revenue streams. Develop skills to increase funding for early childhood and analyze financial reports and records. Focus is on creating a realistic budget, monitoring expenses to align them with the budget and fiscal needs of the center. Students will recognize when to make appropriate revisions and adjust-ments to the budget. Understand that sound fiscal management and accountability includes ways to increase financial resources through grant writing and/or fund raising. Identify and implement managerial functions related to financial management: planning, organizing, staffing, parent fees, and record-keeping, controlling and monitoring the center funds. Students will investigate the needs of a center and understand the importance of quality equipment and supplies for a center.

#### ECE 464

#### **Legal and Ethical Issues in Early Childhood** (*Prerequisite: HED 220*)

Focus is on legal and ethical practices in early childhood. Local, state, and federal statutes and regulations in addition to ethical codes of conduct of National Association for the Education of Young Children, National Head Start Association, and National Education Association, National Health and Safety Performance Standards, and others will be highlighted. Emphasis is placed on opportunities for students to develop an understanding of current legal and ethical issues that are relevant to young children, their health and safety, their culture and ethnic backgrounds, their families, their varied school settings and the community in which they interact. Students will enhance their skills in analyzing legal and ethical dilemmas through presented series of scenarios, discuss and identify appropriate actions for early childhood professionals to take.

#### ECE 466

#### Planning a Dynamic Learning Physical Environment

Focus in on the planning, design, and organization of the physical learning environment in early childhood classroom. The course includes general guidelines for organizing space and materials to promote active learning. To understand how the physical setting contributes to an all exclusive learning experience for all children. The student will learn how to design a well-protected environment of the safety and welfare of the children. This course will inte-grate philosophical/theoretical frameworks and their impact on early childhood environments. The student will directly observe children at play and document their interactions in their physical learning environments (indoor/outdoor). The student will develop the optimum physical learning environment to encourage children to think creatively, problem-solve, make decisions, and expand their thinking skills

#### ECE 490

### **Guided Study in Early Childhood Development** (1.5-4.5 quarter units)

An individual study course under the direction of a specified instructor. Requires prior approval of ECE lead faculty.

#### ECE 650

#### The Early Childhood Teacher

The early childhood teacher faces unique demands

that differ from the typical "school" teacher. Often, early childhood teachers must deal with more intense relationships with both children and their primary caregivers. They may be the first to notice and give voice to concerns. This class examines the critical role of the early childhood teacher. Candidates will have an opportunity to reflect upon their own beliefs, analyze their current role, recognize their strengths and develop a plan to move forward in their practice in ways that strengthen and support their professional growth. This course is designed to address NCATE/NAEYC Advanced Standard 5: Growing as a Professional.

#### ECE 651

#### Promoting Child Development and Learning: Transitions

Early childhood is a period of rapid, dynamic growth and transitions that present a unique challenge to children, parents and educators in an era of accountability. This course is focused on facilitating transitions during early childhood to promote development and learning. Particular attention will be paid to the transition to kindergarten from multiple perspectives that include the child, primary caregivers, teachers and administrators. This course is designed to address NCATE/NAEYC Advanced Standard 1: Promoting Child Development and Learning, Standard 2: Building Family and Community relationships, Standard 4: Teaching and learning and Standard 5: Growing as a professional

#### ECE 652

### Understanding Young Children: Cognition and the Growing Child

This course is designed to further a deeper understanding of the capabilities of young children, birth to age 8, and how to respond to those needs based upon current research. Candidates will have an opportunity to closely examine current learning research in light of current educational reform efforts, develop practical application based upon their findings and demonstrate how this meets the unique needs and potential of young children. This course is designed to address NCATE/NAEYC Advanced Standard 1: Promoting child development and learning and Standard 5: Growing as a professional.

#### ECE 653

Effective Teaching Strategies for Young Children Intentional instruction and differentiated instruction are essential components in children's learning. This class focuses on specific, research based strategies that foster learning in young children both within and across content areas. Close attention is paid to balancing both the standards and Developmentally Appropriate Practice (DAP) with optimum learning experiences for the young child to meet the NCATE/NAEYC Advanced Program Standard 4, Sub-standards 4b, 4c and 4d

#### ECO – Economics

#### ECO 203

#### Principles of Microeconomics

In this course, students will study the price system, market structures, and consumer theory. Topics covered include supply and demand, price controls, public policy, the theory of the firm, cost and revenue concepts, forms of competition, elasticity, and efficient resource allocation, among others.

#### ECO 204

#### **Principles of Macroeconomics**

This course provides an examination of aggregate economic activity. It includes a study of aggregate supply and demand, the monetary and banking systems, aggregate economic accounting, inflation, unemployment, the business cycle, macroeconomic policy, and economic progress and stability, among other things.

#### ECO 401 Market Process Economics I

This course provides a basic understanding of market process economics. Students will learn about the nature and importance of economics, capitalism, wealth and its role in human life, natural resources and the environment, the division of labor and production, the dependence of the division of labor on capitalism, the price system and economic coordination, price controls, socialism, the institutions of private property, economic inequality, economic competition, and monopoly and the freedom of competition.

#### ECO 402

#### Market Process Economics II

This course is a continuation of ECO 401 and is designed to provide students further understanding of market process economics. Students will learn about the concept of productive activity, the productive role of businessmen and capitalists, money and spending, productionism and unemployment, the productivity theory of wages, alternative approaches to aggregate economic accounting, the role of saving in spending, Keynesian economics, and inflation.

#### ECO 415 Labor Economics

(Prerequisites: ECO 203 and ECO 204)

Students will engage in a detailed study of the labor market. Students will learn about the relation of the labor market to other markets. Students will study the demand for and supply of labor, the causes of unemployment, labor market discrimination, what influences the productivity of labor, the effects of labor unions, and the determinants of wages, among other topics.

#### ECO 420

International Economics

(Prerequisites: ECO 203 and ECO 204) Students will apply what they have learned in previous economics courses to analyze the global economic environment. They will learn and apply the law of comparative advantage to understand how all people can gain from international trade. Trade agreements, such as GATT and NAFTA, will be discussed and analyzed. Students will learn about the currency markets and the different types of monetary systems.

#### ECO 430

#### **Economics and Philosophy**

Students will learn about the relationship between philosophy and economics. They will study the philosophic foundations of market process economics, as well as other economic ideas. They will learn about the link between ethics and economics, as well as about the important role businesses play in the economy. Students will study topics such as why businessmen should be honest, the nature of antitrust laws, the virtue of integrity, the nature of government and rights, among others.

#### ECO 447

Money and Banking (Prerequisites: ECO 203 and ECO 204)

(Prerequisites: ECO 203 and ECO 204) Students will study the U.S. monetary and financial systems. They will learn about the important role these systems play in facilitating the production of wealth in the economy. This class covers the principles of money; the Federal Reserve System; the determinants of interest rates, bond prices, and stock prices; the different types of financial institutions; monetary theory; and monetary policy.

#### ECO 490 Guided Study

This is individual study under direction of the instructor. It requires prior approval of appropriate academic department.

#### ECO 607

#### **Economics for Managerial Decision-Making**

In this course, students study the price system, market structure, and consumer theory as they apply to managers in a variety of decision-making environments. This course covers the use of mathematical and economic decision-making tools for determining optimal levels of output, resource usage, and capacity planning.

#### ECO 630

#### Global Economic Geography

(Prerequisite: ECO 607)

A survey of the global economy, this course examines how organizations identify and inventory resources in terms of manpower (demographics), industrial organization and development, sources of raw materials, and the current means of connectivity (e.g., language, as well as telecommunication and transportation infrastructures). It includes exposure to various sources of global economic information, such as the "Country and Industry Report," U.S. government reports, online computer information, and various private sources such as banks and credit card bureaus. Students compile reports that focus on country, region, and industry analysis of opportunity and prospects.

### ECO 631

#### **Global Trade Policy and Procedure** (*Prerequisite: ECO 607*)

An examination of the development and current status of U.S. and foreign trade policies and procedures, this course focuses on GATT, NAFTA, European Integration, and other emerging regional trading blocs. It examines the impact of trade and foreign operations caused by national and regional antitrust laws. It surveys the procedures necessary for government approval of importing and exporting, including the legal options available to facilitate and overcome difficulties and disputes in foreign trade.

#### ECO 635

#### **Economics for Executive Managers**

This course provides the executive with the tools necessary for decision-making in a variety of environments. Topics include elasticity, market structure, marginal analysis, monetary theory, the business cycle, exchange rates, international trade, among others. Emphasis will be on the applications of economic theory to strategic decision-making.

#### EDA – Educational Administration

#### EDA 607

#### Induction Seminar

This is the initial course in the professional administrative services credential program. Students meet in a group setting and individually with the instructor. The group setting consists of four seminars of 4.5 hours per seminar. Individualized meetings will be with the candidate's mentor at the candidate's site. The major focus of the course is the development of the candidate's individualized professional development plan which will guide the choice of activities and content for the remainder of the program. Candidates design and begin a field based project which is to be based on the total curriculum of the program. Candidates are also introduced to the mentoring process and choose mentors for the program. In addition, the course reviews the key competencies of the preliminary administrative services credential; provides an overview of the issues facing administrators in today's schools; and integrates advanced knowledge regarding business, the superintendency, facilities, and technology into contemporary school administration. Grading is by S or U only. Course is eligible for an In Progress (IP) grade.

#### EDA 608

#### **Professional Development Seminar**

This is the professional development course in the professional administrative services credential pro-

gram. Students meet in a group setting once a week for 4.5 hours per seminar over a month period and individually with the instructor. Students report on their progress in implementing the professional development of public policy; organizational and cultural environment; and management of information systems, and human and fiscal resources. A discussion of related ethical issues is included in each seminar. Grading is by S or U only. Course is eligible for an In Progress (IP) grade.

# EDA 609

#### Assessment Seminar

This is the capstone course for the professional administrative services credential program. It is a summative experience which will be conducted in group and individualized settings. The project designed in the induction seminar will be reviewed. Activities developed during the Professional Development Seminar will be summarized and presented. Projects developed throughout the program will be presented and the course work will be integrated into the context of contemporary problem solving administrative work. There will be an emphasis on applying the knowledge and experience gained in the program to the future challenges facing education. Grading is by S or U only. Course is eligible for an In Progress (IP) grade.

#### EDA 614

# Educational Leadership in Schools Today

The theories, principles, and concepts related to leadership, administration, and management applied to education. Application and implications of theory for the instructional leader and educationrelated manager.

#### EDA 617

## Historical and Philosophical Foundations of Leadership

This course represents the foundational course for the Master of Science in Educational Administration and is designed as preparation for other courses in the program. The writings of Plato,Aristotle, and Machiavelli to teachings in the United States of educational philosophers such as John Dewey and leadership scholars such as James MacGregor Burns, Peter Senge, and Thomas Seriogvanni will be studied to understand the continuum and progression of the history of thought on leadership studies as they relate to educational administration

# EDA 618

Legal and Ethical Foundations in Education Introductory course in educational law and ethics. Examination of education law, codes, and regulations and their school level applications. Focus on areas of school law likely to be used by beginning school administrators.

#### EDA 619

# Financial Leadership and Management

Introduction to public school finance policies and practices with an emphasis on site level finance. Exploration of federal, state, and local revenue sources, district and school budgeting, and financial management procedures. Introduction to public school budget, accounting procedures, and governing laws. Direction by practicing school administrators when investigating issues in public school finances.

# EDA 620B

Preliminary Administrative Field Experience Supervised application of theoretical concepts in practical settings. Emphasis on day-to-day administrative functions, policy analysis and implementation. Demonstrated competency in areas of school administration required by the Commission on Teacher Credentialing for awarding the California Preliminary Administrative Services Credential. Grading is by S or U only. Course is eligible for an In Progress (IP) grade.

#### EDA 620C Field Experience

A required field experience course for candidates who are seeking only the MS in Educational Administration degree. Concentrates on relevant, practical educational categories and functions as an Independent Study. Note: This course does not meet the requirements for the preliminary administrative services credential in California. Candidates for the credential must take EDA620B. Grading is by S or U only. Course is eligible for an In Progress (IP) grade.

# EDA 620I

# Intern Field Experience in Educational Administration

Internship for Administrative Services Credential program. Practicum/ field work day- to- day administrative functions, policy analysis and implementation, collaboratively supervised by National University and the candidate's school district of employment. Demonstrated competency in areas of school administration required by the Commission on Teacher Credentialing for awarding the preliminary administrative services credential. Grading is by S or U only. Course is eligible for an In Progress (IP) grade.

# EDA 623

# Curriculum Alignment, Assessment and Accountability

Analysis of curriculum development and methods of aligning standards, instruction, and assessments. An instructional leader's perspective of instructional theory, curriculum development, and curriculum design methods for aligning course contents to articulated goals and aligning valid assessment to the evaluation of the instructional program.

#### EDA 624

# Supervision and Evaluation of Instruction

Theoretical and practical framework for supervising and evaluating instruction. A variety of theoretical perspectives and skills for engaging in the practice of supervision of instruction, curriculum assessment, program quality, and standards-based instruction. Emphasis on instructional leadership in maintaining and increasing teaching effectiveness provided through relevant professional development opportunities.

## EDA 625

#### Technology and Data Analysis for Effective Instruction

Administrative perspective on using instructional technology. Methods of using technology to improve administrative functions, including generating instructional data, analyses, using data to improve instruction, and legal and ethical issues surrounding educational technology.

# EDA 626

Human Resources in Diverse School Communities Analysis of social and political forces impacting human resources leadership and school-community relations. Internal and external components of operation of personnel and school management functions. Needs of diverse communities, cultural pluralism, personnel issues, and personnel and community relationships related to state and federal laws and local policies. Collective bargaining's impact on human resources and community relationships.

#### EDA 628 Seminar in Educational Leadership and Management

Organizational development, mobilization of human and fiscal resources, restructuring, building a school environment that embraces diversity. Administrative tasks in schools and school districts. Schools as political systems focusing on the improvement of instruction. Knowledge drawn from other preliminary administrative services credential courses and from direct, practical experiences.

#### EDA 631 Shared Vision of Learning

Provides an opportunity for the candidate to learn to facilitate the development, articulation, implementation and stewardship of a vision of teaching and learning that is shared and supported by the school community.

### EDA 632

# Culture of Teaching and Learning

Provides an opportunity for the candidate to learn how to advocate, nurture, and sustain a school culture and instructional program that is conducive to student learning and staff professional growth. Coursework and fieldwork focus on the implementation of state adopted academic content standards, frameworks and instructional materials as well as assessment and accountability systems.

#### EDA 633

# Management of the School in the Service of Teaching and Learning Provides an opportunity for the candidate to learn

Provides an opportunity for the candidate to learn how to ensure the management, operations, and resources of an organization provide for a safe, efficient, and effective learning environment. The program includes the study and application of organizational theory that reflects effective leadership and management concept and strategies that contribute to student achievement and the professional participation of all adults in the school community.

### EDA 634

# Working with Diverse Families and Communities Provides an opportunity for the candidate to learn

Provides an opportunity for the candidate to learn how to work effectively with families, caregivers and community members; recognize the goals and aspirations of diverse families; respond to diverse community interests and needs; and mobilize community resources in the service of student achievement. In this regard, the program offers the candidate an opportunity to examine and evaluate their attitudes toward people of different races, cultures, and ethnic backgrounds as well as examine their attitudes toward sexual orientation and individuals with disabilities so they will be able to be an effective leader in a diverse setting and value individuals from different family structures, religions, races, cultures, socio-economic status and ethnic backgrounds, and treat them with fairness and respect.

# EDA 635

#### Introduction to Personal Ethics and Leadership Capacity

Provides an opportunity for the candidate to examine, practice and model a personal code of ethics, including protecting the rights and confidentiality of students, staff and families. The program provides an opportunity for the candidate to practice professional leadership capacity, including shared decision-making, problem-solving and conflict management and foster those skills in others. The program provides an opportunity for the candidate to examine site and district responsibilities with regard to students with special needs. The program develops each candidate's ability to effectively act as a spokesperson for the school to the extended school community. The candidate has multiple opportuni-ties to model personal and professional ethics, integrity, justice and fairness and receive feedback from the program and peers; reflect on personal leadership beliefs and practices and recognize their impact and influence on the performance of others; and develop mechanisms for sustaining personal motivation, commitment, energy, and health by learning to balance professional and personal responsibilities.

#### EDA 636

#### Political, Social, Economic, Legal and Cultural Understanding

Provides an opportunity for the candidate to learn about political, societal, economic, legal and cultural influences on schools. By augmenting the candidate's knowledge of these interconnections, the program develops the candidate's ability to understand, respond to, and influence the larger political, social, economic, legal and cultural context of schools and leadership. The program content should provide opportunities for the candidate to practice both team leadership and team membership so that the candidate can effectively generate and participate in com-munication with key decision-makers in the school community. The candidate has an opportunity to learn how to view himself or herself as a leader of a team and as a member of a team by engaging in course work and field work that provides opportunities to both lead and work collaboratively.

# EDA 637

#### **Action Research** (Prerequisite: ILD 625)

This course is designed to provide the knowledge and skills required to generate and evaluate research relevant to various areas of professional education. The work of the educator will be emphasized throughout the course as students produce a major research and writing project. Students prepare a research proposal in their area of practice, obtain Institutional review Board (IRB) approval, conduct the study and prepare an oral and written report. Course include relevant aspects of professional writing while remaining focused on the practical needs of educators who wish to join the larger professional community in their field of specialty. This class is scheduled for two months one day a week and at the end of that time a grade of "IP" will be posted then the maximum length of time is 10 additional months. Class size is 10. Grading is by H, S, or U only.

# EDA 650

Ethics and Leadership in the Educational Setting This course introduces the connection between leadership and ethics. Students will study traditional ethical frameworks as presented by early Greek writers, past and present day theologians, non-believers, and leadership to consider the long-range implications in their leadership activities, especially in the educational setting.

# EDA 694

# Thesis

(Prerequisite: ILD 625 and an undergraduate or graduate statistics course. Students must have written permission of lead faculty to enroll in the course.) This course is a supervised experience culminating in the completion of a thesis. The student prepares a research proposal, obtains Institutional Review Board (IRB) approval, conducts the study and prepares the written thesis. This class is scheduled for 2 months, meets once a week and at the end of that time a grade of "IP" will be posted then the maximum length of time is 10 additional months. Class size is limited to 5 students. Grading is by H, S, or U only.

# EDT – Educational and Instructional Technology

# **FDT 601**

# Instructional Design

An overview of the instructional design process Topics include learning theories, needs assessment, analysis of subject matter content, development of goals and objectives, classification and sequencing of objectives, design of instructional strategies, selection and integration of media-based delivery systems, design of print and multimedia instruction and formative evaluation strategies.

# EDT 603

Advanced Instructional Design (Prerequisite: EDT 601)

A graduate seminar/practicum focusing on four aspects of the instructional design process: (1) establishing and maintaining effective relationships with

clients and subject-matter experts; (2) analyzing an education/training problem and developing potential instructional solutions; (3) developing effective strategies and materials to implement an instructional solution; and (4) examining theories and practical issues involving instruction, information, cognition and technologies as they relate to the instructional design process.

#### EDT 605

#### Technology and Educational Theories and Practices

This course provides a comprehensive view of curricular issues facing the K-12 teacher as the role of technology stimulates change in teaching methodology within the classroom. Topics focus on the using technology to support constructivist learning, build-ing technology-supported learning communities on the Internet, student-directed research projects, collaborative communication both among students and between students and their mentors, and constructing personal hypermedia tools and resources.

# EDT 607

# **Multimedia in Instruction** (*Prerequisite: EDT 603*)

A comprehensive exploration of current techniques for designing multimedia instructional packages. Topics include pattern languages, object-oriented programming, user-task analysis, visualization, 3D modeling, interaction design, multimedia project management and style guides.

#### EDT 608

# Computer-Based Technology in the Classroom

A comprehensive overview of the use of computerbased technology in the educational environment and integration of computer-based applications into instruction in the classroom. Includes study and hands-on experience of such topics as the computer as a tool, tutor and tutee. Addresses the impact of the different computer modalities used in education, terminology, classroom technology management, introduction to the Internet and integration issues of educational technology. Also includes hands-on practice of productivity tools for word processing, presentation, spreadsheet and database management.

# EDT 609

# Distance Learning

(Prerequisite: EDT 607)

An exploration of the central issues involved in distance education from print-based correspondence courses to more contemporary, digital approaches. Focuses primarily on the use of Internet e-mail, the World Wide Web, electronic bulletin boards and conferencing systems and video teleconferencing to provide educational opportunities that are time- and place-independent. Using a systems perspective, this course provides foundational knowledge of the historical context, theory, and processes involved in designing, developing, and delivering distance learning. The course will introduce participants to key concepts and principles that drive the design of effective distance learning, including types and levels of interaction, synchronicity or asynchronicity of interaction, and locus of control over content and pace of instruction. Students are introduced to the larger system in which distance courses are embedded and explore issues and concerns related to initiating distance learning programs and supporting distance learning implementation within an organization. Success of a distance learning system depends on appropriate matching of technologies and media to business and instructional needs. Students therefore develop relevant knowledge and skills in this area, experiencing, reading about, and discussing various media and technologies that can support distance learning delivery.

# EDT 610

Teaching in the Online and Hybrid Environment This comprehensive course covers principles and strategies for conducting online lessons in a variety

# **Course Descriptions**

of online teaching environments including hybrid courses, with a primary focus on how teaching strategies have evolved in order to fit the new medium of online learning. Students survey theories and applications of online learning and teaching. Special focus is given on the use of the Internet for implementing distance education systems for adult learners. The course covers hands-on tools such as web page design authoring tools and videoconferencing technology. Career paths in the arena of online teaching will also be investigated.

## EDT 611

# Current Issues in Instructional Technology

A topical seminar exploring the most current issues in instructional technology design. Topics might include new developments in CD- or Web-based authoring tools, privacy and/or copyright issues, international standards or emerging training/educational approaches based on enhanced information technologies (e.g., voice or visual pattern recognition, intelligent agents, improved compression algorithms). (Prerequisite: EDT 609)

#### EDT 612

Creating Meaningful Learning with Technology This course focuses on ways to integrate technology as a tool for communication, inquiry, and construction for meaningful learning in K-16 and corporate classrooms. Students apply traditional learning theories to new technology-based methods and techniques, including lesson-based Web projects, chat sessions, and virtual learning communities. Students attain a working knowledge of how to evaluate and operate selected software, design web pages and Web Quests, download files, use list- servs, manage school servers, and utilize firewalls. Students wrestle with contemporary issues involving the protection of children on the Internet, copyright law, netiquette, censorship, and the future of the Internet.

# **FDT 613**

#### Simulations and Virtual Reality (Prerequisite: EDT 611)

Introduction to the use of simulated environments as a component of education/training programs. Topics include a historical review of simulation, instructional design principles applied to virtual reality as a tool for instruction, current constraints in both stand-alone and networked systems, and future possibilities for simulated learning environments.

# EDT 614

#### The Effect of the Internet on the Meaning of Schooling

#### (Prerequisite: EDT 612)

In this course students explore the paradigm shift in the definition of education as the Internet makes information, teachers and other students available across time and space. Learning theories are defined and the ways that the Internet supports and chal-lenges these theories are explored. The course explores the changing role of the teacher as well as of the educational institution, in both K-12 and higher education. E-schools, virtual schools, online instruction, web-supported class room instruction, and other technology-supported models are defined and explored. Challenges to society are explored and current models and a current example of online instruction is researched.

# EDT 615

# Seminar in Performance Technology

(Prerequisite: EDT 613) An examination of performance technology as a tool for improving organizational effectiveness and applying educational interventions. Reviews litera-

ture on performance technology models, approaches to organizational needs analysis, theories and change strategies from the organizational development (OD), human resource development (HRD), human resource management (HRM), environmen-tal engineering (ENG) and electronic performance support systems (EPSS).

# EDT 616

# Motivating Learners Through Gaming and Simulation

(Prerequisite: EDT 614)

Introduces students to the use of video games, simulations and computer games in educational and training environments. The primary focus is to increase students' "games literacy" and demon-strate, through hands-on exploration, how games and simulations can be highly-effective learning tools. Students will play and analyze a variety of different games, examine games in relation to traditional learning and motivational theories, investigate the various issues surrounding games and look to see what is in store for games in education in the future. Students will also learn how to build games to use in their classroom as well use software that helps their students understand new concepts by creating games themselves.

# EDT 623

Web-based Instruction

(Prerequisite: EDT 615) An examination of the most current approaches to

using the World Wide Web as a platform for instruction. Review of existing Web-based courses/programs as well as hands-on experience with current design/editing systems including HTML and DHTML—utilizing Dreamweaver. This course pro-vides foundation knowledge of the context, theory, and processes involved in designing, developing, and delivering Web-Based Instruction. The course will introduce participants to key concepts and principles that drive the design of effective Web-Based Instruction, including evaluation, instructional approaches, learning sequences, interactive learning, assessment, collaboration, learner motivation, glob alization issues, technical requirements, and supplemental learning options. To help students develop relevant knowledge and skills in this area, they will analyze current research and thinking on existing and proposed web based instructional theory and implementations.

# **EDT 655**

# Issue and Trends in Educational Technology

A survey of a wide range of state-of-the-art issues and trends that have an impact on the field of educational technology at local, state, national and international levels. Also addresses the basic principles of professional behavior and ethics with respect to students, peers, administrators and teachers from other disciplines, as well as parents and families.

# EDT 660

## Multimedia and Interactive Technologies

An overview of the use of multimedia and interactive technologies in the educational environment, this course focuses on the design and production of multimedia products, with an emphasis on the appropriate application of learning theories to the designing process. Students will develop media literacy via exposure to video conferencing, art programs, PowerPoint, Dreamweaver MX, image scanning and editing, as well as video and sound digitization. Students will also gain competence in desktop publishing skills and teacher efficiency tools like Excel for grade sheets and web pages to enhancing parent-teacher communication.

# EDT 671

#### **Curriculum Design for Online Learning**

A comprehensive course on how to design curriculum that will be implemented in an online teaching environment. Specific online learner methodologies will be discussed. Online course authoring systems for use in K-16 and corporate education will be surveyed. Students also get hands-on experience with web design software, productivity software and data collection tools. Issues in online curriculum design will be explored, such as Internet resource citing, technology trends in learning environments, Internet resources for exceptional children, professional development skills, and popular uses for technology in various subject areas.

# EDT 693

#### **Evaluating and Improving Instructional Programs** (Prerequisite: EDT 616 or EDT 623)

An exploration of alternative theories and strategies for evaluating the effectiveness of instructional programs. Introduces qualitative and quantitative approaches to student outcome assessment, portfolio evaluation and continuous quality improvement strategies as they apply to the design and improvement of instructional systems. Capstone prospectus developed.

# EDT 695

# Educational and Instructional Technology Capstone Project (Prerequisite: EDT 693)

The final required component of the MS in Educational and Instructional Technology. In this course, students complete an instructional or educational design/multimedia capstone project under the supervision of a faculty member. Students meet weekly with a faculty supervisor to make a progress report and discuss issues or problems related to their project. Grading is by H, S, or U only.

# EEA – Enterprise Architecture

## EEA 601

**Enterprise Architecture Concepts and Theory** Introduces the basic concepts, theories, and documentation frameworks upon which enterprise architecture is based. Enterprise architecture is viewed as a management and documentation process, with approaches from the private, public, defense, and international sectors being presented. Analysis of all major enterprise architecture frameworks including Zachman, TOGAF (Open Group), Federal Enterprise Architecture Framework, Treasury Architecture Framework, Homeland Security Architecture Framework and the Department of Defense Architecture Framework. These are also compared with various versions used in the commercial sector. Highlighted areas include executive involvement, governance, value, and support for decision-making. Developing and implementing enterprise architecture programs are covered as is the training of the architecture team.

# EEA 602

# **Enterprise Architecture Planning**

Introduces the concepts and theories associated with organizational strategic planning as the basis for enterprise architecture, provides an examination of the Federal Enterprise Architecture Program Management Office reference models, how to define business architecture utilizing business strategy, goals and objectives, the technological environment and external variables including location, organizational culture and strategic business planning. Provides an understanding of how to plan and manage an EA project within an enterprise, including development of a statement of work, scheduling, requirements analysis, risk management, the role of security and information assurance, and the formulation of architectural principles.

# EEA 603

# **Enterprise Architecture Implementation**

Analysis and integration of different Enterprise Architecture Methodologies , review of basic concepts in light of an integrated repository, Activity based costing and cost/benefits analysis, developing performance measures in the context of the OMB Reference Models (Performance Reference Model), Balanced Scorecard and GPRA, use of visual modeling from transition to implementation, managing and incorporation of legacy systems, information assurance and security architecture, stakeholder communication strategies and maintenance of EA as an asset within an enterprise.

# EEA 604

# **Enterprise Architecture Integration**

This course covers the integration of EA components

across the matrices of different frameworks (Zachman, FEAF, TEAF, TOGAF, etc) and the OMB Reference Models, the integration of business, technical, data and application architectures, configuration management and standards.

# EGR – Engineering

#### EGR 301

# **Engineering Mathematics** (*Prerequisite: MTH215*)

An examination of the major mathematical tools for engineers and scientists.

#### EGR 304

# Statics and Strength of Materials

(Prerequisite: EGR 301)

Introduction to the key topics in strength of materi-als with focus on applications, problem solving and design of structural members, mechanical devices, and engineering systems.

# EGR 307

Introduction to Software, Engineering and Ethics This is an introductory course for students enrolled in a bachelor's degree program in the School of Engineering and Technology. Students are introduced to the important aspects of engineering, computer hardware and software and ethics. Team skills and the scientific approach to problem solving through analysis and design are presented. Computer tools and programming are introduced.

#### EGR 310

# **Engineering Economics**

(Prerequisite: MTH 215)

Economic Analysis for decision making with emphasis on rate of return, net present value, benefit-cost and multi-objective evaluation methods. Cost estimation and alternative analysis.

# EGR 313

# **Electrical Circuits and Systems**

(Prerequisite: MTH 215) A study of fundamentals of direct and alternating current, basic circuit theory, three-phase circuits, transformers, electrical generators, and motors.

#### EGR 316

## Legal Aspects of Engineering

Course focuses on basic principles and new developments in the legal aspects of architectural, engineering and construction processes. Coverage includes contractor licensing, professional design services, lia-bility, intellectual property, and competitive bidding.

# EGR 319

### Introduction to Engineering Graphics and Auto CAD

(Prerequisite: MTH 215)

Introduction to the latest version of Auto CAD software for two- and three-dimensional modeling, engineering graphics and technical drawings.

#### EGR 440

# **Project Management Fundamentals**

# (Prerequisite: EGR 307)

This course focuses on project management concepts and definitions, network scheduling techniques, strategic planning, risk management, cost control, and project implementation.

# EGR 486A

#### **Engineering Senior Project I** (Prerequisite: Completion of 12 BSCET or 14 BSDET

core courses) A culminating experience for BSDE and BSCE

majors involving a substantive project that demonstrates a synthesis of learning accumulated in each major. This is the first part of a two-part Engineering Senior Project sequence. Students will be working in teams of two to four students and doing research leading to preliminary development of the final project product.

#### EGR 486B Engineering Senior Project II

(Prerequisite: EGR 486A)

Two-month course, meets once a week. A continuation of EGR 486A. In this second part of the Engineering Senior Project, students finalize the project, prepare the final project paper and present project results to faculty and outside experts.

# ELB – Electronic Business

# ELB 620

# Principles of Electronic Business

Introduction and overview of Internet enabled business transactions from a managerial perspective. The course serves as foundation for the E-Business program and addresses E-Business strategies, Cyberlaw, Internet marketing, Internet infrastructure and security, E-Business applications and highly relevant emerging Internet business models.

#### **ELB 620S**

# Principios de Negocios Electrónicos

Es una introducción y panorama general de las transacciones de negocios a través de Internet, desde una perspectiva gerencial. El curso sirve como base del programa de Negocios Electrónicos y plantea estrategias para negocios cibernéticos, Mercadotecnia Electrónica, leyes prevalecientes en cibernética, mercadotecnia por Internet,

Infraestructura cibernética y seguridad, aplicaciones de negocios vía Internet, así como modelos emergentes de negocios vía Internet

### ELB 621

**E-Strategies and Business Models** 

(Prerequisite: ELB 620)

This course provides an in-depth analysis of Internet Business Models and E-Business Strategies. The course enables students to analyze the value and components of E-Business Models and the concept of strategic planning within the context of E-Business.

## ELB 622

# E-Business Systems Development

(Prerequisite: ELB 620)

The course discusses the business and computing issues and activities essential to developing successful e-Business systems from a combination of user, business and computing viewpoints to identify the range of commerce and computing issues that need to be resolved together to ensure a successful result. The course provides ample guidance on applying this approach within organizations.

# ELB 623

# Advanced Web Design

(Prerequisite: ELB 620, ELB 622)

This course introduces current principles of Internet Application Development beyond visually appealing user-interfaces. Specific design concepts will be applied to an advanced web-design or web-conceptualization during a class project. The course focuses on the principles of HTML, JAVA and XML application programming. Practical exercises will be conducted throughout the course.

# ELB 624

# Internet Marketing

The course represents an in-depth analysis of marketing and advertising components of E-Business, strategic marketing decisions in the digital age and a study of successful marketing models. During the course, students create a strategic marketing plan for an Internet business.

#### ELB 625

# **Electronic Payment Systems and Internet Security** (*Prerequisite: ELB 620*)

The course introduces the various concepts of digital money and alternative electronic payment systems. Students explore the role of the banking system and the global monetary system from a managerial perspective. The course includes studies of security methods and systems including access control, firewalls, encryption, public key infrastructure, digital signatures, authentication and non-repudiation.

#### ELB 635

# **E-Logistic and Supply-Chain-Management** (*Prerequisite: ELB 620*)

The course offers a thorough introduction to private and public E-Marketplaces, demand chain structures and Supply Chain Management, procurement and fulfillment. Student will explore the associated digital infrastructure from an E-Business perspective. A special focus will be on current industry applications in this field. The course will offer processes and strategies for evaluation, design and implementation of those highly complex applications.

#### ELB 638

# **E-Business Information and Knowledge Systems** (*Prerequisite: ELB 620*)

The course introduces the data-information-knowledge-intelligence chain and its relevance to E-Business profitability and growth. It includes a study of the role and deployment of data models, database systems, data warehouses and business intelligence.

## ELB 640

### Emerging Communication Technologies in E-Business

#### (Prerequisite: ELB 620)

The course provides a study of telecommunications networks that support the digital global economy and E-Business. Networks are evaluated as enablers of strategy, growth and financial success. The course will also examine the impact of wireless communications and other emergent technologies on business management, operations and planning.

# ELB 650A

# Master's Research Project I

(Prerequisite: Completion of all program core course requirements with a GPA of 3.0 or better.) This course is the first part of the master's research project. It focuses on the research and selection of an appropriate topic on one of the research or applications of electronic business. Students develop the project in a three- to five-member group and utilize skills previously acquired in their respective core curriculum. This is a regular one-month course. Grading is H, S, or U only.

#### ELB 650B

Master's Research Project II (Prerequisite: ELB 650A)

A continuation of ELB 650A. Students develop the project in a three- to five-member group. Students complete a detailed analysis and design of the project within the first two weeks of the course. After completing the project, students formally present their final product to a review panel for evaluation and grading. Grading is H, S, or U only.

# ELB 656

### Cyberlaw and E-Legal Issues

(Prerequisite: ELB 620)

The course focuses on the global level and regulatory framework in which E-Business operates. It provides a study of current and proposed laws and regulations and their impact on E-Business. Emphasis is put on current legal issues relevant to start and operate various E-Businesses. Further emphasis lies on legal case studies from a business prospective.

# EMB – Executive Master in Business Administration

#### EMB 651

#### **Cases Studies in Business Decision Making** Integrating and applying the theories and tools in economics, finance, accounting, management, mar-

keting, knowledge management and business law to solving real world problems through case studies. Multiple industries will be evaluated. Group and individual, as well as oral and written, casework will be emphasized.

# EMB 652

# **Business Games (Simulations)**

Integrating and applying the theories and tools in economics, finance, accounting, management, marketing, knowledge management and business law to solving real world problems through business simulations, allowing for decision making with multiple variables changing simultaneously, and developing winning strategies in a competitive environment. This course includes the use of computer simulations and situation analysis, and negotiations. Multiple industries will be evaluated. Group (team) and individual, as well as oral and written, work will be emphasized.

#### EMB 671

## **Global Business Simulation**

This course provides the student with the opportunity to apply concepts and theories learned in their life experiences and academic program to virtual organizations and competitive environments. Students make strategic and functional decisions for virtual organizations that change the internal and external business environments and performance results of the companies. Students are able to "see" the effects of alternative selections in executive decision making.

## EMB 671S

# Simulación de Negocios Globales

Este curso ofrece al estudiante la oportunidad de aplicar conceptos y teorías aprendidas en sus experiencias profesionales y académicas, a organizaciones virtuales y ambientes competitivos. Los estudiantes toman decisiones estratégicas y funcionales para las organizaciones virtuales que cambian sus ambientes de negocios externos e internos, y por ende sus resultados. Los estudiantes pueden "ver" los efectos de seleccionar diferentes alternativas en la toma de decisiones.

# EMB 672

# International Risk Management

This course presents theories of risk management in international business and situations that will allow students to apply these concepts and integrate them with their own experiences and those of classmates. In developing alternative potential action plans, the student is encouraged to analyze a wide range of risk related situations and to evaluate short-term and long-term ramifications of decisions in risk management.

# EMB 672S

# Administración del Riesgo Internacional

Este curso presenta teorías de la administración de riesgos para negocios internacionales así como situaciones que permitirán al estudiante aplicar estos conceptos e integrarlos a sus experiencias profesionales, y las de sus compañeros de clase. Al desarrollar planes de acción alternativos, se anima al estudiante a que analice una amplia gama de posibles riesgos relacionados, y que evalúe las repercusiones a corto y largo plazo de las posibles decisiones en la administración de riesgos.

# EMB 673

#### International Strategic Alliances

This course examines new market opportunities, competitive threats and diffusion of business models associated with international business. Students develop the ability to evaluate the strategic use of alliances within broad competitive strategies. The formation of strategic alliances as a tool among multinational and international organizations are discussed in order to maximize the efficient and effective allocation of resources in pursuit of competitive advantage.

# EMB 673S

# Alianzas Estratégicas Internacionales

Este curso examina las oportunidades en los nuevos mercados, las amenazas competitivas y difusión de los modelos de negocios asociados con los negocios internacionales. Los estudiantes desarrollan la habilidad de evaluar el uso estratégico de las alianzas en el marco de las estrategias competitivas genéricas. Se discute la formación de alianzas estratégicas como una herramienta para las empresas multinacionales e internacionales, a fin de maximizar la eficiente y efectiva distribución de recursos en la búsqueda de ventajas competitivas.

# EMB 674

# **Global Competitive Strategies**

This course uses economic and strategy theories to analyze the competitive behavior of organizations. It is intended to enable the student to assess the strategic choices made by organizations in the dynamic competitive environment of international business. The course examines the impacts that business choices have on the survival and profitability of an organization. The competitive environment is analyzed in terms of cultural, economic, societal, political-legal, and technological factors.

### EMB 674S

# Estrategias Competitivas Globales

Utiliza las teorías estratégicas y económicas para analizar el comportamiento competitivo de las organizaciones. Capacita al estudiante en la valoración de las opciones estratégicas implementadas por las organizaciones en el entorno dinámico y competitivo de los negocios internacionales. El curso examina también el impacto de las opciones de negocios en la supervivencia y rentabilidad de una organización. El entorno competitivo es analizado en función de los factores culturales, económicos, sociales, legales, políticos y tecnológicos.

#### EMB 682

# Accounting for Managers

This focus of this course is on the content, analysis, and interpretation of the financial and managerial accounting information used by managers in making the strategic decisions necessary to achieve organizational goals. The course also includes international accounting issues and the ethical impacts of such issues.

#### EMB 682S Contabilidad Gerencial

El enfoque de este curso es el contenido, análisis e interpretación de la información financiera y contable utilizada por ejecutivos en la toma de decisiones estratégicas necesarias, para lograr las metas de la organización. El curso incluye también temas de contabilidad internacional y el impacto ético de los mismos.

#### EMB 683

# International Economic Strategies

This course introduces students to the conceptual framework within which the key financial decisions of multinational corporations can be analyzed. It covers the international balance of payments, foreign exchange rate determination, exchange risk, hedging, and interest arbitrage, international money and capital markets, international financing, and international portfolio management.

# EMB 683S

# Estrategias Económicas Internacionales

Este curso es una introducción al marco conceptual dentro del cual se analizan las decisiones financieras más importantes de las corporaciones multinacionales. Incluye la Balanza de pagos internacional, la determinación del tipo de cambio, el riesgo cambiario, las coberturas cambiarias y el arbitraje de intereses, los mercados internacionales y la administración de la cartera internacional.

# EMB 686

# Data and Research Analysis for Decision-Making

This course focuses on applied statistics, research methodology, and problem-solving through the integration of computer technology with quantitative techniques. The course is taught using lectures, case studies, and statistical computer packages.

# EMB 689 Leadership and Negotiation

This course examines the nature and process of leadership and developing negotiation strategies in executive environments. It surveys theories of leadership, negotiations, bargaining and conflict resolution. The course emphasizes case studies and problem solving employing ethical business models.

# EMB 689S

# Liderazgo y Negociaciones

El curso examina la naturaleza y proceso del liderazgo, así como el desarrollo de estrategias de negociación en el ambiente ejecutivo. Investiga las teorías de liderazgo, negociaciones, regateo y solución de conflictos. Enfatiza el estudio de casos y la solución de problemas utilizando modelos éticos de negocios.

# EMB 696 EMBA Project

Working in teams or as individuals under the guidance of their assigned faculty advisor, students clarify research topics and identify sources from which data is gathered in preparation for the project. Students then gather data and present their research in written form to the client organization, if applicable, and to the instructor. Grading is H, S, or U. Course is eligible for an In Progress (IP) grade. Course is two months in length.

#### EMB 696S Proyecto EMBA

(prerrequisito: haber completado todos los curso fundamentales)

Trabajando en equipos o en forma individual, y bajo la tutela de un asesor académico, los estudiantes clarifican los temas de investigación e identifican las fuentes y recursos necesarios para recopilar datos e información, a fin de preparar su proyecto final de grado. Posteriormente, los estudiantes recopilan datos y presentan su investigación en forma escrita a la organización-cliente, y al instructor. Grading is H, S, or U only. Course is eligible for an In Progress (IP) grade.

# ENE – Environmental Engineering

# ENE 601

**Environmental Engineering Laboratory** (*Prerequisites: SCI 101 or SCI 101A*)

This course is dedicated to exploring the contemporary Environmental Engineering experience. An indepth study of standard methods for analysis of water and wastewater, sampling techniques and preservation of samples, and interpretation of analytical data related to bio-solids, nitrogen and phosphorous treatments. Through lectures, demonstrations, readings, student will also learn the strategic role of the environmental lab in the modern workplace.

# ENE 602

# Environmental Microbiology and Biological Treatment

(Prerequisites SCI203, SCI203A)

This course provides a comprehensive introduction to the design, analysis and implementation of microbiology and biological treatment. There is strong emphasis on biology of microorganisms and general bacteriology, microbiology of aerobic and anaerobic bacteria as well as physical and chemical properties of water.

# ENE 603

#### **Unit Processes of Environmental Engineering** (*Prerequisites CSC220, CSC208*)

This course emphasizes the application of physical and chemical methods applied for water and wastewater treatment, filtration and sedimentation, options, absorption, ion exchange, aeration, softening and disinfecting as combined with review of atmospheric science aspects such as water, air and soil.

#### ENE 604

# Engineering Aspects of Environmental Engineering Quality Control

This course introduces application of environmental science and engineering toward remediation of environmental pollution, analysis of water, air and land pollution, including hazardous waste and engineering of mitigation measures as well as water and wastewater pollution prevention. It addresses the current pollution prevention procedures outlined by the EPA for industry that include source reduction, recycling/reuse treatment, ultimate disposal and combinations of these preventive measures.

# ENE 605

# Foundation of Air Pollution Engineering and Equipment Design

This course provides an overview of the field of air quality management with an emphasis on the sources of air pollution and how they affect the environment, including the effects on humankind, plants and animals. Students will study federal, state and local regulatory requirements and air pollution law, including the California and federal clean air acts, ambient air quality standards and government policies on pollution prevention. This course includes an introduction to air pollution meteorology, climatology, chemistry, atmospheric pollutants, air quality and emissions assessment, control of emissions from stationary sources, prevention and control measures and design.

# ENE 606

#### Principles of Water and Wastewater Engineering and Treatment

# (Prerequisite: CSC220)

This course focuses on the concept of water quality standards, physical, chemical and biological treatment processes of water and wastewater; transportation, storage and distribution of water systems; wastewater collection; sanitary sewers and Governmental Regulatory Water Act; storm drain and advanced water and wastewater treatment. Effect of Federal Regulation on water treatment plant design, design and application of potable water and wastewater systems, chemical conditioning for water softening and corrosion control.

# ENE 607

# Toxic and Hazardous Waste Remediation Analysis and Solid Waste Recovery

(Prerequisites: SCI 101 or SCI 101A)

The intent of this course is to give students an understanding of solid waste; its characterization, production, storage, collection and transportation. The student will also review statutes and regulations for the management of hazardous material/waste; its identification, transportation, monitoring, storage, minimization, treatment and disposal. This course introduces and explores Toxicology from multiple functional levels, measuring toxicity and assessing risk, respiratory toxicology, ecological toxicology and toxic wastes and remediation technologies. Statuary and regulatory basis for toxic and hazardous waste remediation, identification, transportation, monitoring, storage, treatment and disposal.

#### ENE 608

# Site Assessment and Environmental Remediation Methodologies

This course introduces the issues relevant to the investigation and management of contaminated sites, emphasizing problem diagnosis/characterization and the development of site restoration/corrective action clean up programs. This includes methods for the development site restoration tasks, methods for evaluating the progress of corrective action programs and application of risk assessment methods as a decision-making tool. The focus of this course is to synthesize technically sound principles and techniques that can be applied globally to contaminated sites in different regions of the world.

#### ENE 609A

#### Master's Research Project I

(Prerequisites: Completion of all program core course requirements with a GPA of 3.0 or better.)

This course is the first part of the master's research project. It focuses on the research and selection of an appropriate topic on one of the research or applications of environmental engineering. Students develop the project and utilize skills previously acquired in their respective core curriculum. This is a regular one-month course. Grading is H, S, or U only. Course is eligible for an In Progress (IP) grade.

### ENE 609B

Master's Research Project II

(Prerequisites: ENE 609A)

This is a continuation of ENE 609A. Students complete a detailed analysis and design of the project. This course is a two-month, one session per week course. After completing the project, students formally present their final product to a review panel for evaluation and grading. Grading is H, S, or U only. Course is eligible for an In Progress (IP) grade.

# ENG – English

#### ENG 013

# **Strategies for Writing**

This course provides the tools and practice students need to write successful college-level essays. It emphasizes the development of clear and logical writing through a focus on the basics of sentences, paragraphs, and essays. (This course is considered developmental in nature and does not award collegiate credit). Grading is S or U only.

#### ENG 100

# Effective College English I

(3 quarter units) (45 class hours of instruction) (*Prerequisite: Satisfactory performance on Accuplacer*) The first of a two-course sequence designed to provide incoming students with the expository and argumentative writing and critical thinking skills required for college course work. Emphasizing essay-length compositions, the course covers critical reading and analysis, thesis formation and essay organization and basic research and revision techniques.

#### ENG 101

# Effective College English II

(3 quarter units) (45 class hours of instruction) (Prerequisite: ENG 100)

The second of a two-course sequence designed to provide incoming students with expository and argumentative writing skills.

#### ENG 240

Advanced Composition

(Prerequisites: ENG 100/101)

An advanced course in expository and argumentative writing that continues the work of Effective College English. While Effective College English I and II focus on essay formulation and research, Advanced Composition emphasizes textual analysis. Students continue to practice the construction of arguments based on analytical reasoning, critical thinking and research skills.

#### ENG 300

### English Practicum and Portfolio

A practicum that exposes students to a variety of experiences in English and language classrooms.

Through such experience, students are able to analyze the importance of their academic studies in literature, composition, language and linguistics. Students observe a full range of activities common to English classrooms in public middle schools or high schools. In addition, the course gives instruction in the requirements of the English portfolio. Grading is S or U only.

#### ENG 333

# Written Business Communication

(Prerequisites: ENG 100/101) A continuation of the kinds of expository writing that began in ENG 100/101. This more advanced course stresses applications and models in business communications: letters, memos, sales, research and marketing reports.

# ENG 334A

# **Technical Writing**

(Prerequisites: ENG 100/101) A workshop to help students whose careers will involve communicating technical information clearly. Students are encouraged to practice on profes-

ly. Students are encouraged to practice on professional models in their own disciplines while learning those attributes common to all effective technical writing.

# ENG 350

# **Fundamentals of Linguistics**

(Prerequisites: ENG 100/101) An introduction to contemporary linguistics. Covers the phonology, morphology and syntax of the English language with an emphasis on language acquisition as related to the developmental stages of childhood. The course is especially designed for students intending to teach elementary school students.

# ENG 352

# Origins of English

(Prerequisites: ENG100/101) Examines the origins of language both within a person and within culture. Covers language acquisition and the history of the English language through its own developmental stages, including the evolution of standard American English and its major dialect communities.

# ENG 365

# Creative Writing (Prerequisites: ENG 100/101)

An advanced course for students who want to explore more sophisticated writing genres. The course surveys techniques in writing one or more genres, at the discretion of the instructor: short fiction, drama, poetry and screen writing.

# ENG 375

#### Nature Writing (Prerequisites: ENG 100/101)

An advanced course for students interested in using writing as a means of exploring the natural world. This course surveys nature writing in its various forms (essays, articles, poetry, journals, etc.) as well as effective nature writing strategies. Examines the ways that individuals, as thinkers and writers, interact with their local and global environments.

# ENG 490

# **Guided Study**

(1.5-4.5 quarter units) Individual study under direction of instructor. Requires prior approval of appropriate academic department.

# ENG 600

# Seminar in Literary Theory

This graduate level course examines historical and current issues in literary criticism and theory with particular attention to the developments of the last fifty years. Through an examination of the historical and theoretical background of contemporary literary criticism, students learn to identify and evaluate assumptions about how we read and understand lit-

# **Course Descriptions**

erature. The course emphasizes both reading and writing literary criticism in order to develop the vocabulary and skills necessary to participate in scholarly literary debate.

#### ENG 610

# Seminar in Multicultural Literature of North America

This graduate level course examines the core concepts of race, ethnicity, culture, and multiculturalism from the standpoint of recent developments in American literary canon formation. Students will analyze these concepts and trace their application in a variety of American literatures such as Asian American, African American, Latino American, and Native American. Students will synthesize current multicultural literary theories with a corpus of significant literary texts.

#### ENG 620A

#### Seminar in a Literary Period or Movement I

An advanced, historically oriented study of a literary period, such as the English Renaissance, or of a movement such as Romanticism or Postmodernism. Variable topic selected by the instructor. (May not duplicate content of ENG 620B.)

# ENG 620B

Seminar in a Literary Period or Movement II An advanced, historically oriented study of a literary period, such as the English Renaissance, or of a movement such as Romanticism or Postmodernism. Variable topic selected by the instructor. (May not duplicate content of ENG 620A.)

# ENG 640

# Seminar in Poetry

An advanced study of the history and practice of poetry through an understanding of poetic forms such as the sonnet, villanelle, haiku, ballad, etc. The focus is on defining the genre through close reading of a rich selection of both traditional and contemporary exemplars of the various forms, including free verse

# ENG 660

# Seminar in Literary Hypermedia

This graduate level course examines the history and current practice of literary hypermedia. Through the close reading of primary stand-alone and Web-based hypermedia installations, the course examines hypermedia as a specific literary genre but also contextualizes the practice of hypermedia in relation to work in related fields, such as print media, graphic design, film, and performance art. The course also examines the historical antecedents to computerbased literary forms, surveying pre-digital experiments in visual-textual hybrids from the Middle Ages to Modernity.

#### ENG 665

# Film Theory

An overview of film theory designed to give students the critical tools necessary to describe and evaluate various aspects of cinema art. This course introduces concepts from a wide range of approaches, including Deconstruction, Existentialism, Marxism, Post-Theory, phenomenology, psychoanalysis, transcendentalism, focussing on such thinkers as Althusser, Bazin, Deleuze, Derrida, Sobchack, and Truffaut. (Essays are included as a part of the MFA digital portfolio.)

# ENG 666

# Film History: The Silents

A survey of films produced before the advent of recorded sound, this course focuses on the early national cinemas of French, Germany, the Soviet Union and the United States; attention is directed to concepts of visual narratology, montage and the conventions of acting, set design, lighting and movement.

# ENG 667

# Film History: American Film

A study of the development of cinema in the United States, this course is a broad overview of American film making; topics include genre, the relationship of film to art, politics, religion and society and the treatment of ethnic groups, women and class by Hollywood.

# ENG 668

# Film Genre Studies

A course in a specific genre of film in an international or American historical context, including the western, the epic, the Biblical epic, film noir, the crime story, science-fiction adventure, agitprop, or other film genres; an intensive study of the conventions, artists, styles associated with specific genres and the historical conjuncture and circumstances in which the genre appeared.

#### ENG 669 World Film

A study of the film tradition of a specific nation or group of nations other than the United States, this course is an intensive study of contrasting visual styles of filmmaking, directors, artists and themes prominent in that tradition; a survey of the elements of film making and theory as developed with one country; discussion of transcultural and transcendental film categories, universals, values and the essence of film art.

### ENG 670

# Seminar in Comparative Literary Studies

This graduate level course examines the history and practice of comparative literary studies. Students analyze literary texts across national and linguistic as well as temporal, cultural, and disciplinary lines. The course juxtaposes texts and cultural artifacts, both literary and nonliterary, of different cultures, disciplines, and genres in a variety of ways in order to develop new perspectives on themes, forms, and contexts. plines.

# ENG 680A

#### Seminar in a Theme I

Study of a literary motif or theme over time and/or across cultures. Variable topic chosen by the instructor. Examples of themes might be: exile and return, human maturation and aging, utopia/distopia, or self-reflexivity in literature. (May not duplicate content of ENG 680B.)

# ENG 680B

# Seminar in a Theme II

Study of a literary motif or theme over time and/or across cultures. Variable topic chosen by the instructor. Examples of themes might be: exile and return, human maturation and aging, utopia/distopia, or self-reflexivity in literature. (May not duplicate content of ENG 680A.)

## ENG 685

#### **Great Directors: American**

The study of the canon of work of a specific American director; a comprehensive study of the artistic achievements of a specific director; detailed interpretation and analysis of the techniques and concepts employed by a specific director.

# ENG 686

# **Great Directors: International**

The study of the canon of work of a specific director, excluding American; a comprehensive study of the artistic achievements of a specific international director; detailed interpretation and analysis of the techniques and concepts employed by a specific international director.

# ENG 690A

# Seminar in a Major Author I

A critical study of the work of a single author, such as Shakespeare, Cervantes, Whitman, Dostoevsky, Neruda, Morrison. Variable topic selected by the instructor. Special attention will be given to biography, culture, and literary context. (May not duplicate content of ENG 690B.)

# ENG 690B

# Seminar in a Major Author II

A critical study of the work of a single author, such as Shakespeare, Cervantes, Whitman, Dostoevsky, Neruda, Morrison. Variable topic selected by the instructor. Special attention will be given to biography, culture, and literary context. (May not duplicate content of ENG 690A.)

# ENG 699

# English Capstone Course:

The capstone project consists of a critical essay of publishable quality that will serve as the Master's thesis. Program assessment also takes place during this course. Students will take ENG 699 as the last course in the M.A. in English program. Exceptions may be made if the student is within two courses of program completion, with the approval of the program director. Grading is S or U only. Course is eligible for an In Progress (IP) grade.

# ENM – Engineering Management

# ENM 600

Introduction to Engineering Management This practical course is designed to equip the students with all the skills and management related topics covered in a graduate course in engineering management. This course which offers its graduate engineers management skills, presenting them with the most recent management concepts and covering such issues as management of quality, materials and new product development, human resource management and communication, project management and critical path networks and management of the supply system and inventory control.

# ENM 601

# **Engineering Project Management**

This course focuses on the fundamentals of engineering project management and tools, in particular, Microsoft Project and provides guidelines for what project managers need to have in order to succeed. The emphasis is on project/team management techniques and hands-on training on using MS Project to manage various tasks in a typical project. This course provides an introduction to project negotiation, project manager selection and project auditing and terminating. In addition, this course also provides technical expertise of how to manage projects on the web. In addition, several software packages available commercially for the management of projects will be discussed. This course will be conducted as a computer laboratory course.

# ENM 602

Management of Risk, Contracts, and Legal Issues This course focuses on risks, contracts and legal issues related to engineering management. This course provides an understanding of basic principles of contract law. In addition, this course summarizes a survey of contracts, sales, agencies, personal property, commercial paper, and associated topics. The course also covers materials on the theories and principles of risk management. In addition, it explores a range of issues including cost estimation, pricing competitive bids, risk allocation, and incentive contract design, evaluation of threats and opportunities, buffer management in a supply chain, investment appraisal, portfolio management and safety formula.

#### ENM 603

#### Managing Projects in Operation Management (Prerequisite: ENM600)

This course examines the design and management of internal capacity as it applies to all organizations. It examines the principles and techniques for designing, analyzing, and managing operations processes. It addresses how all operations and behavior com-

ponents fit together and how to identify and resolve the right problem. Topics include statistical process control, supply chain management, safety and security issues, and total quality management. This course also reinforces the concept of project management engineering within operation settings. Topics covered would include: overview of operations management, problem identification and resolution, process design, development, and management, applications of technology and knowledge management, integration and application and evaluation.

### ENM 604 Quality Management

This course focuses on quality aspects related to project management, operations and other aspects of engineering. The course covers materials on the theories and principles of total quality management required for a successful organization. In addition, key global trends, strengths and weaknesses of U.S. companies in the global marketplace, costs of poor quality, and ethical dilemmas will be discussed. In addition, concepts related to six sigma, benchmarking, SPC, quality tools, and ISO 9000-2000 will be discussed.

### ENM 605

## Infrastructure Management

This course focuses on project management aspects related to infrastructure management. This course presents the principles and techniques of project management, beginning with the conceptual phase by the owner, through coordination of design and construction, to successful project completion.

### ENM 607A

# Engineering Management Capstone Course I

(Prerequisites: All core classes in program) These project courses focus on the application of engineering process learned through this program.

engineering process learned through this program. The students are to select research topics under the guidance of the instructor and conduct research and write a detailed report. Working in teams or as individuals under the guidance of their assigned faculty advisor, students clarify research topics and identify sources from which data is gathered in preparation for the project. This project may require detailed implementation of computer tools such as Microsoft Project 2002. Students then gather data and analyze the data. One-month course, meets twice a week. Grading is by H, S, or U only. Course is eligible for an In Progress (IP) grade.

# ENM 607B

#### **Engineering Management Capstone Course II** (*Prerequisite: ENM 607A*)

These project courses focus on the application of engineering process learned through this program. The students are to select research topics under the guidance of the instructor and conduct research and write a detailed report. Working in teams or as individuals under the guidance of their assigned faculty advisor, students clarify research topics and identify sources from which data is gathered in preparation for the project. This project may require detailed implementation of computer tools such as Microsoft Project 2002. Students then gather data and present their research in both written and oral form to the client organization, if applicable, and to other students and faculty. Two-month course, meets once a week. Grading is by H, S, or U only. Course is eligible for an In Progress (IP) grade.

# EXC – Special Education

EXC 602A

# Field Experience: Special Education (3 quarter units)

A special education field experience that orients students to all types of exceptionalities and service delivery options in the field of special education. Emphasizes the role of the special education teacher and parent involvement. Grading is S or U only.

#### EXC 602B Field Experience: Inclusive Settings (3 quarter units)

A field experience that orients students to all types of exceptionalities and service delivery options for special needs students served in general education settings. Emphasizes the roles of general education and special education teachers and parent involvement. Grading is S or U only.

#### EXC 603

#### Typical and Atypical Development in Young Children

An overview of typical and atypical development pathways from birth to five including major theories, principles, concepts, and current research and practice dealing with the impact of delays, disabilities or chronic health impairments on the young child's growth and development are examined. Implications of atypical development on play and learning within an ecological framework are addressed.

#### EXC 603A

# Student Teaching Seminar

(1.5 quarter units) Integrates theory and practical approaches to reallife situations experienced by candidates during student teaching. Content areas include portfolio preparation, reflection, collaboration and legal and ethical issues related to the teaching profession. Grading is S or U only.

# EXC 604

# Exceptionality and Diversity in the Classroom

A survey of the history and definition of special education, theoretical orientations and developmental characteristics of special needs students who manifest various types of disabilities, including mild/moderate and moderate/severe disabilities. Examines the history of racial and ethnic groups in the U.S. In addition to exceptionality, explores cultural and linguistic factors along with issues that impact academic success, critical topics of cross-cultural understanding and awareness, policies of inclusion and the effects of language, culture and culture contact.

# EXC 605

# Assessment in Young Children

This course is designed to develop a student's familiarity with a wide variety of assessment techniques and instruments for infants, toddlers and young children with special needs. Instruments include formal and informal assessments, curriculum-based instruments, observation and data collection methods, evaluations of preschool and infant/toddler environments and family interviewing techniques. Students complete several screening and assessment projects. Issues related to cultural linguistic diversity and the family's role in assessment and evaluation are addressed. Two month course taught only onsite.

#### EXC 606

# Family Systems and Partnerships

Families and family-centered practice in early intervention is explored from a family systems theory model, with a focus on strategies for promoting parent/ professional partnerships in service coordination. Culturally responsive practice, the influence of disability on the family, family-to-family support, and the appreciation of families as a dynamic unit with a wide range of strengths, concerns, and aspirations beyond their need for specialized health and developmental services and support.

### EXC 607

IFSP Process: Collaboration and Consultation

Student will develop skills in writing Individualized Family Service Plans. This course introduces relevant special education legislation, laws and policies. Students will develop skills in matching intervention strategies to the strengths and needs of young children with disabilities and their families. Students will acquire skills in the development and implementation of Individualized Family Service Plan in a variety of settings.

# EXC 608

# Interventions for Young Children with Disabilities

This course focuses on the development of teacher competencies as related to design, management, and implementation of ECSE environments and interventions appropriate for young children with special needs. The students will explore, plan and implement developmentally supportive activities with infants and toddlers and their families. This course takes a family-centered perspective and emphasizes the role of collaborative planning with families and caregivers in preparing developmentally supportive environments maximizing interactions with nondisabled peers

# EXC 609

### **Field Experience**

This Field Experience is designed as a culminating experience in the Early Childhood Special Education Certificate Program. Specifically, students will be required to assess, plan, teach and evaluate the progress of young children with disabilities. Each candidate will have at least two in-depth experiences, one in a program for infants and toddlers and their families and one in a preschool program that includes children with disabilities. Students must complete a total of 100 clock hours. Only taught onsite.

# EXC 615

#### Technology for Persons with Disabilities

(Prerequisite: Completion of Generic Core Requirements) An investigation of the current technologies that can empower individuals with disabilities to access their total environment throughout life. Focuses on technology applications in the school, home, community and workplace.

# EXC 615A Field Study: Technology for Persons with Disabilities

# (1.5 quarter units)

(Prerequisite: Completion of Generic Core Requirements) Practical field activities designed to promote and supplement the course goals and outcomes of EXC 615. Students are encouraged to take the field study concurrently with EXC 615. Grading is S or U only.

# EXC 620

# **Supporting Positive Behavior**

An examination of behavioral, psychodynamic, biophysical and environmental theories of behavior management. Emphasizes practical approaches and strategies useful for managing student behavior in educational settings.

# EXC 621

# Introduction to Students with Autism Spectrum Disorders (ASD)

This course introduces the history and terms that explain the parameters of teaching students with the ASD classification. A review of the law and rights of parents as well as issues regarding service and specialized programs are included. Using clinical research-based exploration, the student will develop an understanding of what is needed to provide a successful teaching environment for students who fall within the spectrum.

# EXC 622

# Assessment and Behavioral Applications in Autism

This course focuses on the empirical bases for the assessment and treatment of autism. The research literature supporting the efficacy of behaviorally based (Applied Behavior Analysis, ABA) approaches in the treatment of autism is unequivocal. This course will provide the student with an overview of the ABA approach to treating autism and how ABA fits within an overall treatment paradigm for autism. The involvement of schools, agencies and various professionals will be covered.

# EXC 623

# Evidenced-Based Intervention/Instruction for Students with Autism

This course is designed to provide the student with relevant strategies/instructional methods that are appropriate for young children (Grades Pre-K -5) with emphasis on development of communication skills, and older children (Grades 6-12) that include strategies on inclusion with general education standards as well as those that include Life Skills curriculum. All intervention strategies are taught according to their ultimate success in a full-inclusive environment. Assignments contribute to a multiple portfolio piece (for the Autism Certificate portfolio) that students can refer to when working with individualized programs for students with ASD.

# EXC 624

# Autism: Collaboration with Parents and Families

This course assists educators, therapists and program administrators to build supportive relationships with families as a foundation for designed appropriate learning experiences for their child with autism. Using clinical and research-based feedback from parents of children with autism the student will develop the knowledge and skills for communicating accurately and sensitively. The student will develop the knowledge and skills to assist in selecting and evaluating intervention services and help families manage short term and long term issues.

# EXC 625

# Exceptional Children in the Classroom

An examination of four major types of learners: special education, multicultural and English language learners, gifted/talented and students at risk. Explores how those groups of learners can be best served in general education using effective instructional and behavior management strategies.

# EXC 630

#### Assessment and Instructional Planning for Special Needs Students

An overview of informal assessment, curriculumbased assessment and a variety of diagnostic tests related to academic performance. Provides procedures for developing the IEP and methods for implementing programs to meet the objectives specified in the IEP case study. Note: This course meets one night per week during a two-month period.

# EXC 637

Action Research

# (Prerequisite: ILD 625)

This course is designed to provide the knowledge and skills required to generate and evaluate research relevant to various areas of professional education. The work of the educator will be emphasized throughout the course as students produce a major research and writing project. Students prepare a research proposal in their area of practice, obtain Institutional Review Board (IRB) approval, conduct the study and prepare an oral and written report. The course includes relevant aspects of professional writing while remaining focused on the practical needs of educators who wish to join the larger professional community in their field of specialty. This class is scheduled for two months one day a week and at the end of that time a grade of "IP" will be posted. The maximum length of time is 10 additional months. Grading is H, S, or U only. Class size is limited to 10 students.

### EXC 644

# Reading and Language Arts Methods for Special Education

(Prerequisite: Completion of Generic Core Requirements) A survey of theories about teaching reading and the language arts to the student with disabilities. Discusses various assessment instruments relevant to the language arts, selection and administration of

instruments and the interpretation and communication of results. Through the use of case studies, students learn how to develop, implement and evaluate prescriptive plans based on diagnostic procedures. Class will meet one night per week for two months.

### EXC 644A

# Field Study: Reading and Language Arts Methods for Special Education

(1.5 quarter units) (Prerequisite: Completion of Generic Core Requirements) Practical field activities designed to promote and supplement the course goals and outcomes of EXC 644. Students are encouraged to take this field study concurrently with EXC 644. Class will meet the first and last class session of a two-month format. Grading is S or U only.

#### EXC 650

# Consultation and Collaboration for Special Education

A discussion of the spectrum of interpersonal and interactive learning skills required of the special education teacher. Emphasizes counseling with parents to enhance the parent-professional partnership. Stresses the sharing of knowledge and mutual efforts between professionals and parents to meet the special needs of exceptional students.

### EXC 655A

**Professional Induction Seminar** (3 quarter units)

The first course in the Level II credential program. An Individual Induction Plan, a culminating activity project, a candidate planning guide and electronic portfolio activities are initiated. Grading is S or U only.

# EXC 655B

# Exit Seminar

(1.5 quarter units)

The last course in the Level II Credential program. Presentation of the electronic portfolio to the University Supervisor and District Support Provider and submission of the culminating activity project, initiated in EXC655A, are included. Grading is S or U only.

# EXC 655I

### Professional Induction Seminar for the Internship Program

This is a required course for credential students participating in an approved Internship program. An Individual Induction Plan, culminating activity project and a portfolio are developed as part of this course. Grading is S or U only.

## EXC 656

# Best Practices for Special Needs Students

Development of an understanding of the philosophical, political, legal and fiscal variables that impact contemporary issues, trends and practices in the field of special education. Basic principles of professional behavior with respect to pupils, peers, administrators, teachers, parents, families and community agencies.

# EXC 657

# **Community Resources and Transition**

A comprehensive course designed to equip educators with the ability to plan and implement successful transitional life experiences for students with disabilities. Emphasis on collaboration with other educational and community agencies involved in the transition process.

# EXC 658

# Advanced Specialization in Mild/Moderate Disabilities

An advanced course in skills needed for effective collaboration, curriculum design and modification and assessment processes for students with mild/moderate disabilities.

## EXC 659

# Advanced Specialization in Moderate/Severe Disabilities

Advanced methodology designed to ensure that candidates are instructional leaders. Effective communication skills and transdisciplinary relationships with families, caregivers and paraprofessionals stressed.

#### EXC 660

# Instruction of Learners with Mild/Moderate Disabilities

(Prerequisite: Completion of Generic Core Program) Overview of the characteristics of mild/moderate disabilities. Discusses the planning and evaluation of curriculum, methods, techniques, basic strategies, materials and media used for teaching students who manifest mild/moderate disabilities across the content areas. Addresses positive behavior support. Emphasizes learning strategies, study skills, criticalthinking skills, educational assessment, interactive teaming and parent involvement as they relate to IEP development and evaluation of instruction.

# EXC 660A

# Field Study: Instruction of Learners with Mild/Moderate Disabilities

(1.5 quarter units)

(Prerequisite: Generic Core Requirements) Practical field activities designed to promote and supplement the course goals and outcomes of EXC 660. Students are encouraged to take this field study concurrently with EXC 660. Grading is S or U only.

### EXC 665

# Instruction of Learners with Moderate/Severe Disabilities

(*Prerequisite: Completion of Generic Core Requirements*) An overview of the characteristics of

moderate/severe disabilities. Discusses the planning and evaluation of curriculum, methods, techniques, basic strategies, materials and media used for teaching students who manifest moderate/severe disabilities. Addresses positive behavior support, communication and social networks, as well as movement, mobility, sensory and specialized health care. Stresses linkages to educational assessment as well as interactive teaming and parent involvement as they relate to IEP development and evaluation of instruction.

#### EXC 665A

#### Field Study: Instruction of Learners with Moderate/Severe Disabilities (1.5 quarter units)

(*Prerequisite: Generic Core Requirements*) Practical field activities designed to promote and supplement the course goals and outcomes of EXC 665. Students are encouraged to take this field study concurrently with EXC 665. Grading is S or U only.

#### EXC 685A

# Student Teaching - Mild/Moderate Disabilities

(Prerequisite: All other course work in the Level I Mild/Moderate credential program) The first month of the full day, full-time supervised student teaching experience with mildly and moder-

ately disabled students. Candidates work with certified master teachers providing special education services to students with mild/moderate disabilities. Consists of a minimum of 100 hours. Grading is S or U only.

# EXC 685B

#### **Student Teaching -Mild/Moderate Disabilities** (*Prerequisite: All other course work in the Level I*

Mild/Moderate credential program) The second month of a full-day, full-time supervised student teaching and experience with mildly and moderately disabled students. Candidates work with certified master teachers providing special education services to students with mild/moderate disabilities. Consists of 100 hours. Grading is S or U only.

# EXC 685I

# Supervised Teaching for Interns (Mild/Moderate Disabilities)

(Prerequisite: All other course work in the Level I Mild/Moderate internship credential program) This course is designed to provide a final evaluation and assessment of the National University teacher intern that takes place at the end of the coaching cycle. This supervised teaching experience with mildly and moderately disabled students takes place after the intern candidate receives a minimum of four months of mentorship and support from a University Support Provider/Mentor and a local Intern Site Support Provider. Candidates work with their own classroom providing special education services to students with mild/moderate disabilities. Grading is S or U only.

# EXC 690A

# **Student Teaching - Moderate/Severe Disabilities** (Prerequisite: All other course work in the Level I

Moderate/Severe credential program) The first month of the full-day, full-time supervised teaching experience with moderately/severely disabled students. Candidates work with certified master teachers providing special education services to students with moderate/severe disabilities. Consists of a minimum of 100 hours. Grading is S or U only.

### EXC 690B

# **Student Teaching - Moderate/Severe Disabilities** (Prerequisite: All other course work in the Level I

Moderate/Severe credential program) The second month of the full-day, full-time student teaching experience with moderately/ severely disabled students. Candidates work with certified master teachers providing special education services to students with moderate/severe disabilities. Consists of a minimum of 100 hours. Grading is S or U only.

# EXC 690I

#### Supervised Teaching for Interns (Moderately/Severe Disabilities)

(Prerequisites: All other course work in the Level I Moderate/Severe credential internship program) This course is designed to provide a final evaluation and assessment of the National University teacher intern that takes place at the end of the coaching cycle. This supervised teaching experience with moderate and severely disabled students takes place after the intern candidate receives a minimum of four months of mentorship and support from a University Support Provider/Mentor and a local Intern Site Support Provider and completes all coursework. Candidates work within their own classroom providing special education services to students with moderate/severe disabilities. Grading is S or U only.

# EXC 694

# Thesis

(Prerequisite: ILD 625 and an undergraduate or graduate statistics course. Students must have written permission of lead faculty to enroll in this course.) This course is a supervised experience culminating

in the completion of a thesis. The student prepares a research proposal, obtains Institutional Review Board (IRB) approval, conducts the study and prepares the written thesis. This class is scheduled for 2 months, meets once a week and at the end of that time a grade of "P" will be posted then the maximum length of time is 10 additional months. Grading is H, S, or U only.

# FAS – Farsi (Persian)

# FAS 100

# Beginning Persian I

(Co-requisite: FAS 100A) This is the beginning course in Persian. Elementary skills in the standard communication modes of speaking, reading and listening to Persian are introduced. The course includes an introduction to the Persian alphabet and numerals and usage of basic

# vocabulary.

# FAS 100A

# Beginning Persian I Laboratory (1.5 quarter units) (Co-requisite FAS 100A)

This is an intensive online laboratory course in which the student interacts in a speaking and listening mode to a programmed sequence of language units. These are parallel to the corresponding materials covered in FAS 100, Beginning Persian I.

# FAS 101

Beginning Persian II (Prerequisites: FAS 100, FAS 100A) (Co-requisite: FAS101A) This course is a sequel to the beginning course in Persian. The course includes an introduction to the basic parts of a Persian sentence and the basic written Persian phrases for oral and reading comprehension.

#### FAS 101A

## Beginning Persian II: Laboratory (1.5 quarter units)

(Co-requisites FAS101)

(Prerequisites: FAS100/100A)

This laboratory course involves students in the use of common Persian terms orally in situational context. The student will be involved in oral interpretation of the basic spoken Persian phrases. Elementary skills in the standard communication modes of speaking, reading, writing and listening to Persian are emphasized.

## FAS 200

Intermediate Persian I

(Prerequisites: FAS101/101A) (Co-requisite: FAS200A)

This course enhances the student's proficiency in spoken and written Persian. This course emphasizes the difference between formal and colloquial Persian. Emphasis is given to both spoken and writ-ten Persian. Grammar and vocabulary are expanded.

# FAS 200A

# Intermediate Persian I, Laboratory

(1.5 quarter units) (Co-requisite: FAS 200)

(Prerequisites: FAS 101/101A)

In this laboratory course emphasis is given to both formal and informal Persian. This course enhances the student's proficiency in standard and spoken Persian. Grammar and vocabulary are expanded.

# FIN – Finance

#### FIN 310

# **Business Finance**

(Prerequisites: ACC 201)

This course is a survey of the basic principles and concepts used in the financial management of a business enterprise addressed from both theoretical and practical standpoints. Topics include money and capital markets, financial management of working capital, capital budgeting and fixed asset management, cost of capital, and short-term and long-term financing by means of debt and equity capital.

### **FIN 440**

# **Financial Institutions**

(Prerequisite: FIN 310)

An examination of the nature and role of financial institutions in the economy, topics include money markets and capital markets, the Federal Reserve System and monetary policy, the commercial banking system, thrift institutions, insurance companies, pension funds, investment companies, and other major financial institutions.

# FIN 442

Investments (Prerequisites: FIN 310 and FIN 440) A survey of principles and practices in the field of

investments, the course covers the valuation of corporate securities of multinational and domestic corporations, portfolio theory, and the measurement of portfolio performance. Emphasizes the role of return and risk in valuing stocks, bonds, options, and in constructing portfolios.

#### FIN 443

#### Working Capital Management (Prerequisite: FIN 310)

A course emphasizing the management of current assets and current liabilities, it covers planning a firm's overall level of liquidity, stressing cash management and credit policies. Also discussed are selected topics such as bank relations, factoring, and secured inventory financing.

#### **FIN 444**

#### **Risk Management and Insurance** (Prerequisite: FIN 310)

An analysis of the risk management problems in the business enterprise, the course emphasizes methodology for risk analysis, insurance principles and practices, techniques for risk and loss control, insurance underwriting, and rating. It also includes product liability, property damage, and bodily injury in business situations.

#### **FIN 446**

#### **International Financial Management** (Prerequisite: FIN 310)

An examination of the international aspects of corporate finance and investing, the course covers balance of payments, foreign exchange with emphasis on exchange rate determination, exchange risk, hedging, and interest arbitrage, international money and capital markets, international financing, and international banking.

# FIN 447

**Financial Planning** (Prerequisites: FIN 310 and FIN 442)

The course is an overview of the broad spectrum of financial planning, including activities such as producing a comprehensive plan to meet the client's needs and goals for sound financial management, gathering of client information, analyzing client objectives, and using communication skills essential to obtaining quantitative and qualitative client data. It also acquaints students with the importance of retirement and estate planning and tax management.

# **FIN 448**

Seminar in Finance (Prerequisites: FIN 310, FIN 440, FIN 442, FIN 443 and FIN 446)

This is a capstone course for students specializing in the area of finance. It exposes students to a wide range of finance related topics, including issues affecting the current financial environment of business firms. The course integrates material from previous courses taken in the finance concentration and introduces the topics of capital budgeting and the process of obtaining long-term funds.

# FIN 449

# Analysis of Financial Statements

(Prerequisite: FIN 310) An examination of U.S. accounting principles, the course emphasizes the analysis and interpretation of financial statements for management and investment purposes. Students evaluate financial statements of actual publicly traded firms. Course material is applicable to credit policy, investment analysis, and other operating and financial policy decisions.

#### **FIN 450**

# Bank Management

(Prerequisite: FIN 310)

Financial decision making, organization and structure of banks and their industry are examined. Topics covered include managing financial assets, deposit acquisition, capital management, bank lending policies and procedures and the investment

function in the bank. International banking service is also covered.

#### FIN 451

# **Real Estate Finance**

(Prerequisite: FIN 310)

Forms of ownership and investment in real estate are examined. In particular, the course includes discussion of markets and methods of financing real property. The impacts of federal taxation on financing residential and commercial real estates are also discussed. Real estate finance topics are covered both from the perspective of borrowers and lenders.

#### **FIN 501**

# Finance Fundamentals (two weeks)

(Prerequisite: ACC 501 or ACC 201)

This course is an introduction to finance for students with knowledge of accounting fundamentals but with no previous exposure to the subject of finance. Topics in this two-week course include security markets, time value of money, short-term and long-term financing, and working capital management. Grading is S or U only.

# **FIN 600**

# Finance for Non-Financial Managers

This course examines the financial and accounting reports that aid managers in making business decisions. In doing so, this course covers issues such as long- and short-term budgeting, key financial statements, the role of the outside auditor, reporting financial information, and valuation of assets and equities.

# **FIN 609A**

#### Seminar in Financial Management (Prerequisite: FIN 310 or FIN 501)

A study of corporate financial management, through case studies and/or term projects, this course covers issues such as sources of long-term financing, cost of capital, capital budgeting, dividend policy, mergers and acquisitions, bankruptcy and reorganization, the globalization of finance, ethical standards, information technology, and financial strategy.

# FIN 630

# **Financial Institutions**

(Prerequisite: FIN 609A)

This course is an examination of the financial policies and practices of commercial banks, savings and loan associations, pension funds, insurance companies, and other major financial management institutions. It discusses sources and uses of funds, their cost and return, and government regulation of the financial sector

# FIN 631

#### Security Analysis and Portfolio Management (Prerequisite: FIN 609A)

This course is an analysis leading to the appraisal and pricing of securities. It discusses the income generating ability of securities, forecasts of trends in the stock and bond markets, fundamental and technical analysis, application of Modern Portfolio Theory (MPT), analysis of active and passive investment strategies, and measurement of portfolio performance.

# FIN 632

# Managing Financial Resources

(Prerequisite: FIN 609A)

An instruction on how to deploy available capital resources to gain maximum advantage, students study capital budgeting policies and procedures, for-mulation of growth and diversification policies, appraisal of income and risk, and establishment of decision-making guidelines.

# FIN 633

#### **Financing Capital Requirements** (Prerequisite: FIN 609A)

A discussion of how to establish capital structure policies and determine the best methods for raising

# **Course Descriptions**

required capital, the course covers formulation of debt, dividend and equity policies, selection of appropriate financing vehicle, and selection of capital market.

#### FIN 635

International Finance

(Prerequisite: FIN 609A) An examination of the international aspects of corporate finance and investing, this course covers the international balance of payments and foreign exchange. It emphasizes exchange rate determination, exchange risk, hedging, and interest arbitrage, international money and capital markets, international financing, and international portfolio management.

## FIN 641

#### Advanced Security Analysis and Portfolio Management

(Prerequisites: FIN 631 and FIN 609A) An in-depth look at several of the advanced topics surveyed in FIN 631, this course includes bond portfolio management strategies, bond betas and their portfolio impact, option valuation models and hedging, practical use of portfolio insurance and hedging, problems with model-dependent hedging, and the use of futures contracts and their objectives. It covers problems faced by corporate and professional investment managers in their effort to hedge portfolio risks and improve portfolio returns.

# FIN 650

# Global Financing for Trade

An examination of the basic financial problems facing an internationally oriented company, this course includes the structure and operations of the international financial system, foreign exchange rates, foreign exchange risks and their management, international sources of funds, international cash management, and basic instruments of international financial transactions (e.g., letters of credit, foreign currency contracts, foreign currency accounts, and banking facilities). Note: Students specializing in financial management may not take this course.

# FIN 651

#### **Commercial Bank Management**

This course is a detailed analysis of the functional areas of banking including the management of deposits, cash, loans, and other asset accounts. Current problem areas in banking such as liquidity, capital adequacy, and problem loans are explored, as well as bank investment accounts and their relationship to profitability and liquidity.

#### FIN 652

**Real Estate Finance** 

# (Prerequisite: FIN609A)

This course presents Real Estate Finance and Investment issues from a portfolio perspective. It provides a complete analysis of real estate partnerships, secondary mortgage markets, adjustable rate mortgages. It also includes the applied topics of corporate real estate, including lease versus own analysis, sale and leaseback decisions, and the role of real estate in corporate restructuring.

# FIN 653

# Financial Engineering and Derivatives

This course provides an introduction to futures and options markets and outlines the different ways in which they can be used. It covers futures and forward contracts, pricing of forward and futures, hedging techniques, swaps, options markets, trading strategies, option pricing models, volatility smiles, and a detailed treatment of hedge parameters such as delta, gamma, and vega. Also discussed is portfolio insurance, value-at-risk measure, multi-step binomial trees to value American options, interest rate options, and other exotic options.

# FIN 654

# **Cases in Financial Studies**

Reflecting the fact the Finance has gone through dramatic changes in the last 20 years, this case study course will expose students to the revolutionary transformation in markets and organization we have seen the financial industry milieu.

# FIN 655

#### **Finance Research Project (Capstone Course)** (Prerequisites: completion of FIN 609A and at least 36 quarter units of core courses)

Students, under the guidance of their assigned faculty advisor, clarify topics, identify sources from which data will be gathered, and complete and present their research in written form. Grading is H, S, or U only. Course is eligible for an In Progress (IP) grade.

#### FIN 670

# **Finance and Accounting for Executives**

This course covers major topics in finance and accounting, with emphasis on current theory and concepts rather than on procedure. Topics include financial statement interpretation and analysis, internal control structure, operating and capital budgeting, capital structure theory, and issues in finance and accounting for U.S. companies with foreign operations.

# FIN 671

# Credit Management

(Prerequisite: FIN 609A) This course is an analysis of credit policy leading to the development of strategic and higher level technical skills appropriate for credit managers. The course will also analyze specific topics like the role of credit in the economy, credit management functions, retail credit, types of consumer credit, regulation of consumer credit, the consumer credit investigation, decision making in credit operation, respon-

sibilities of the credit manager, international trade

# FIN 672

# **U.S. and International Accounting Standards** (*Prerequisite: FIN 609A*)

credit and collection policies and practices.

This course is designed to provide students with the analytical background for dealing with the financial problems in an international context. A concentration in international finance provides effective preparation for careers in multinational corporations, international financial institutions, and various national and international government agencies. The content and instructions are intended to provide a level of understanding and competence appropriate for global general managers in choosing among alternative measurement procedures and establish corporate financial reporting policies.

# FIN 673

# Valuation: Measuring and Managing the Value of Corporation

# (Prerequisite: FIN 609A)

Valuation is designed to explain the theories of valuing a corporation. Topics include: foundations of value, core valuation techniques, how to create value, estimating continuing value, valuing multinational companies, and cross-border and emerging markets valuation.

# FIN 674

#### Managing Financial Institutions and Banking (Prerequisite: FIN 609A)

This course presents an overview of Financial System, Financial Markets, and Commercial Banking in the 1990s to the 21st century in the US and global setting. It covers asset and liability management problems for depository institutions including management issues, and performance analysis of nondepository entities. In addition, emphasis is placed on interest rates and interest rate risk management. International Bond Markets and new Issue Procedures in the Bond Market, digital money, and alternative electronic payment systems will also be discussed.

#### FIN 675

# **The World Economy, Trade, and Finance** (*Prerequisite: FIN 609A*)

This course emphasizes microeconomic concepts related to managerial decision-making. Students will learn to analyze the global business environment of industrialized and developing countries, and to think strategically, using micro and macroeconomics principles. Markets, consumers, producers, trade, distribution, welfare, tariffs, non-tariffs barriers, and monetary and macroeconomics issues of development and transitions will be discussed.

## FIN 676

# International Banking

(*Prerequisite: FIN 609A*) This course examines both the theory and the practice of international banking. It covers the creation of credit and credit rationing; internationalization of banking, the risks and benefits from financial innovation, central banking, bank regulation, deposit protection, capital adequacy and free banking, and selective institutional aspects of international banking. It also reviews the principle of Islamic Banking.

# FIN 677

# Financial Derivatives

(Prerequisite: FIN 609A)

This course presents and analyzes derivatives, such as forwards, futures, swaps, and options. It compares major types of derivatives, shows how they are used to achieve various hedging and speculating objectives, introduces a framework for pricing derivatives, and studies several applications of derivative-pricing techniques outside derivative markets. Topics also include traditional and exotic derivatives, market risk, credit issuer risk, stressed correlation materials, fat tails, and case studies in corporate finance.

# FIN 690

# Guided Study

(Prerequisite: FIN 609A)

This course is individual study under direction of the instructor. It requires prior approval of appropriate academic department.

# FRA – Foreign Language Arabic

#### FRA 201

Intermediate Arabic II

(Prerequisites: ARB 200/200A) (Co-requisite: FRA 201A) This course gives emphasis to both formal and informal Arabic. Rules of grammar and vocabulary are applied in writing simple Arabic sentences when

#### FRA 201A

# Intermediate Arabic II: Laboratory

describing presented materials.

(1.5 quarter units)
(*Prerequisites: ARB 200/200A*)
(Co-requisite: FRA 201)
This laboratory course allows the learner to apply in verbal form the rules of grammar in both standard and dialectic spoken Arabic.

# FRA 300

#### Advanced Arabic I (*Prerequisites: FRA 201/201A*) (Co-requisite: FRA 300A) This course develops student skills in idiomatic and conversational forms of speech, proficiency in moderately complex written structures. Also covered is translation of non-technical texts from Arabic to English and vice-versa. Basic syntactic patterns and vocabulary will b consolidated.

# FRA 300A

#### Advanced Arabic I: Laboratory (1.5 quarter units) (Prerequisites: FRA 201/201A)

(Co-requisite: FRA 300)

This laboratory course practices student skills in idiomatic and conversational forms of speech in moderately complex structures. Also covered is translation of non-technical texts from Arabic to English and vice-versa. Basic syntactic patterns and vocabulary will be consolidated.

## FRA 301

Advanced Arabic II (Prerequisites: FRA 300/300A) (Co-requisite: FRA 301A) This course continues to develop student skills in idiomatic and conversational forms of speech, proficiency in moderately complex written structures. The course makes use of Arabic in film and radio where the student prepares written reports based on the presented materials.

#### FRA 301A

### Advanced Arabic II: Laboratory (1.5 quarter units) (Prerequisites: FRA 300/300A)

(Co-requisite: FRA 301)

This laboratory course continues to develop student skills in idiomatic and conversational forms of speech, and proficiency. The course makes use of Arabic in film and radio where the student prepares written reports delivered orally based on the presented materials.

#### FRA 350

# Fundamentals of Arabic Translation

(Prerequisites: FRA 301/301A)

This course aims to introduce students to basic translation skills and to consolidate their knowledge of Arabic through providing them with sufficient training in translating "nominal" and "verbal' Arabic sentences into English using a variety of texttypes that include high frequency vocabulary and expressions.

# FRA 400

Advanced Arabic Conversation (Prerequisites: FRA 301/301A)

This course develops students' skills in conversational and idiomatic forms of speech. It is based on contemporary literary usage conducted entirely in Arabic. The course is a combination of lecture, discussion, exercises, and communicative language activities based on written text. Basic syntactic patterns and vocabulary will be consolidated.

# FRC – Foreign Language Chinese

# FRC 201

Intermediate Chinese II (Prerequisites: CHN 200, CHN 200A) (Co-requisite: FRC 201A) This course gives emphasis to both formal and infor-

mal Chinese. Rules of grammar and vocabulary are applied in writing simple Chinese sentences when describing presented materials. Grammar and vocabulary are expanded.

# FRC 201A

#### Intermediate Chinese II: Laboratory (1.5 quarter units)

(Prerequisites: CHN 200, CHN 200A) (Co-requisite: FRC 201) This laboratory course allows the learner to apply in verbal form the rules of grammar in standard spo-

ken Chinese. This course enhances the student's proficiency in standard spoken Chinese. Emphasis is given to both formal and informal Chinese.

# FRC 300

Advanced Intermediate Chinese I (Prerequisites: FRC 201, 201A) (Co-requisite FRC 300A) This course develops student skills in idiomatic and conversational forms of speech, proficiency in moderately complex written structures. Also covered is translation of non-technical texts from Chinese to English and vice-versa. Basic syntactic patterns and vocabulary will be consolidated.

#### **FRC 300A**

#### Advanced Intermediate Chinese I: Laboratory (1.5 quarter units)

(Prerequisites: FRC 201, 201A) (Co-requisite: FRC 300) This laboratory course practices student skills in idiomatic and conversational forms of speech in moderately complex structures. Also covered is translation of non-technical texts from Chinese to English and vice-versa. Basic syntactic patterns and vocabulary will be consolidated.

#### FRC 301

Advanced Intermediate Chinese II (Prerequisites: FRC 300, 300A) (Co-requisite: FRC 301A) This course continues to develop student skills in idiomatic and conversational forms of speech, proficiency in moderately complex written structures. The course makes use of Chinese in film and radio where the student prepares written reports based on the presented materials.

# FRC 301A

# Advanced Intermediate Chinese II: Laboratory (1.5 quarter units) (*Prerequisites FRC 300, 300A*)

(Co-requisite: FRC 301)

This laboratory course continues to develop student skills in idiomatic and conversational forms of speech, and proficiency. The course makes use of Chinese in film and radio where the student prepares written reports delivered orally based on the presented materials.

# FRC 400

# Advanced Chinese Conversation

(Prerequisites: FRC 301, 301A)

This course develops students' skills in conversational and idiomatic forms of speech. It is based on contemporary literary and colloquial usage conducted entirely in Chinese. The course is a combination of lecture, discussion, exercises, and communicative language activities based on written texts and video and film clips. Basic syntactic patterns and vocabulary will be consolidated.

# FRC 450

#### Selected Readings in Modern Chinese (Prerequisites: FRC 301, 301A)

This course aims to introduce students to basic translation skills and to consolidate their knowledge of Chinese through providing them with sufficient training in translating modern Chinese into English using a variety of text-types that include high fre-quency vocabulary and expressions in variety of subjects relevant to the contemporary workplace. There will also be relevant English-Chinese translation exercises.

# FRP – Foreign Language Persian (Farsi)

#### FRP 201

Intermediate Persian II (Prerequisites FAS 200, FAS 200A) (Co-requisite: FRP 201A) This course gives emphasis to both formal and informal Persian. Rules of grammar and vocabulary are applied in writing simple Persian sentences when describing presented materials.

#### **FRP 201A** Intermediate Persian II: Laboratory

(1.5 quarter units) (Prerequisites: FAS 200, FAS 200A) (Co-requisite: FRP 201)

This laboratory course allows the learner to apply in verbal form the rules of grammar in both formal and colloquial spoken Persian.

# FRP 300

# Advanced Persian I (Prerequisites: FRP 201,201A)

(Co-requisite: FRP 300A)

This course develops student skills in idiomatic and conversational forms of speech, proficiency in moderately complex written structures. Also covered is translation of non-technical texts from Persian to English and vice-versa. Basic syntactic patterns and vocabulary will b consolidated.

# **FRP 300A**

# Advanced Persian I: Laboratory

(1.5 quarter units) (Prerequisites: FRP 201/201A)

(Co-requisite: FRP 300)

This laboratory course practices student skills in idiomatic and conversational forms of speech in moderately complex structures. Also covered is translation of non-technical texts from Persian to English and vice-versa. Basic syntactic patterns and vocabulary will be consolidated.

#### **FRP 301**

Advanced Persian II (Prerequisites: FRP 300/300A) (Co-requisite: FRP301A) This course continues to develop student skills in idiomatic and conversational forms of speech, proficiency in moderately complex written structures. The course makes use of Persian in film and radio where the student prepares written reports based on the presented materials.

# FRP 301A

Advanced Persian II: Laboratory

(1.5 quarter units) (Prerequisites: FRP 300/300A)

(Co-requisite: FRP 301)

This laboratory course continues to develop student skills in idiomatic and conversational forms of speech, and proficiency. The course makes use of Persian in film and radio where the student prepares written reports delivered orally based on the presented materials.

## FRP 350

# **Fundamentals of Persian Translation**

(Prerequisites: FRP301/301A) This course aims to introduce students to basic translation skills and to consolidate their knowledge of Persian through providing them with sufficient training in translating "nominal" and "verbal' Persian sentences into English using a variety of text-types that include high frequency vocabulary and expressions.

#### FRP 400

#### Advanced Persian Conversation (Prerequisites: FRP 301/301A)

This course develops students' skills in conversational and idiomatic forms of speech. It is based on contemporary literary usage conducted entirely in Persian. The course is a combination of lecture, discussion, exercises, and communicative language activities based on written text. Basic syntactic patterns and vocabulary will be consolidated.

# FSC – Forensic Sciences

#### FSC 620

### Advanced Criminalistics

A survey of trace evidence, physiological fluid evidence (blood, semen, etc.), impression evidence (shoe, tire, etc.), questioned documents, firearms, tool marks, and toxicological evidence with an intro-duction to the operation of a forensic science laboratory; principles of chain of custody; and requisite qualifications and preparation of the expert witness

### for the courtroom.

# FSC 621

### Electronic Crime Scene Investigation: Computer Forensics

A study of different, but closely related, types of computer or digital-related crime, including fraud, stalking, prohibited items, identity theft, and internet-related crimes. A study of investigative techniques utilized in the processing, and interpretation of digital evidence. Students in the course will study basic computer theory, operating systems, digital storage methods, and safe extractions of digital evidence. Related issues such as chain of custody, current legal issues on digital evidence, and methods of seizing, imagining, examining, and presentation of digital evidence.

### FSC 622

#### **Constitution and Criminal Procedure**

An introduction to the foundation for understanding Constitutional laws, the guarantees of the Constitution to citizens of their civil right and civil liberties, and how the Constitution and its amendments influence the criminal justice system. This course covers the constitutional rules, established by Supreme Court, for collecting evidence at crime scene, questioning witnesses/suspects, arresting suspects, and seizing evidence as well as the constitutional rights of the accused at trial.

# FSC 623

#### **Advanced Fingerprint Analysis**

As introduction to basic principles and techniques of fingerprints as applied to crime scenes, forensic evi-dence, identification, and court presentation. Emphasis is on the science of fingerprints, history, pattern recognition, and the application of the Henry Classification System. Additional subjects explored include the proper method of collecting both known and latent prints.

### FSC 630

# **Principles of Forensic Medicine**

Forensic terminology, anatomy, and physiology of the human body with emphasis on the understanding of the underlying pathology of traumatic and sudden, unexpected deaths encountered in forensics. Bone growth and repair as it relates to child abuse, structure and function of the heart relating to sudden deaths, and anatomic areas of the brain prone to hemorrhagic lesions following trauma. Sudden Infant Death Syndrome (SIDS), methods of personal identification and different types of injuries with their characteristic features and mechanisms of death in injuries.

# FSC 631

#### Major Case Investigation

A study of investigative techniques that are utilized in felony crimes of violence and crimes against property, including homicide, rape, arson, assault and battery, robbery, burglary and grand theft. Examines the completion of such cases from initial crime scene through investigation and adjunction.

# FSC 632

# Trace Evidence

Analysis of physical trace evidence, including soil, paint, glass, wood, hairs and fibers, grease, cosmetics, arson and explosive residues, blood-pattern analysis, and questioned documents. Also includes qualifications and preparation of expert witnesses, and operation and functioning of a forensic science laboratory.

### FSC 633

#### Advanced Forensic Toxicology

A comprehensive study of forensic toxicology, poisons, action, toxicity, postmortem characteristics, samples required for toxicological analysis and methods of collection, preservation, and analysis. Includes analyses of chemical, toxicological and pathological characteristics of commonly abused

drugs, including the following: ethanol, barbiturates, narcotics, stimulants, and hallucinogens. Utilizes most appropriate analytical techniques.

# FSC 634

# Advanced Forensic Serology and DNA

A comprehensive study of the principles of forensic identification analysis and comparison of biological evidentiary samples such as blood, semen, saliva, and all other biological samples and tissues. Utilizes electrophoresis, isoelectric focusing, DNA extraction procedures, polymerase chain reaction (PCR), DNA typing, sex and race determination and methods of genetics and DNA analysis and detection. Includes forensic applications of enzyme-linked immunosorbent assay (ELISA) as well as laboratory safety, quality assurance and quality control.

# FSC 635

# Forensic Anthropology and Archeology

Analysis of the methods of skeletal remains (physical and biological anthropology) including species, sex, age, race, stature, congenital abnormality, trauma, cause, manner, and time of death. Analysis of the principles and application of the archeological techniques in crime scene processing.

# **FSC 642**

#### Forensic Pathology (Medico-legal Investigation of Death)

The scientific techniques used in medico-legal investigations, regional injuries and death, firearm injuries transportation injuries, physical injuries, trauma and disease, battered baby syndrome (child abuse) and shaken baby syndrome, sexual assaults, diagnosis of rape, pregnancy, abortion and delivery. Infanticide, asphyxial and drug deaths. Forensic medical evidence, and records for the court

#### FSC 643

Forensic Psychology, Psychiatry and the Law An examination of the nomenclature of mental disorders, diminished capacity and insanity defenses, involuntary commitment, mental competency to stand trial, mentally disordered sex offenders, psychological and psychiatric testing and assessment of criminal offenders, psychodynamic formulation, organic brain dysfunction and forensic neuropathology.

# FSC 647

# **Crime Scene Investigation**

Designed to help students understand techniques and procedures used for approaching and protecting the crime scene. Covers crime scene survey and documentation, collection of fragile and easily destroyed evidence, detailed search of the scene, packaging of initial evidence collected, processing the scene for latent prints, maintenance of the chain of custody and transportation or mail evidence.

### **FSC 648**

# Forensic and Crime Scene Photography

An examination of the basic principles and fundamentals of using photography, video and other visual procedures in forensics with the legal aspects and photographic presentations in court or trial.

# FSC 651

# Selected Topics in Forensic Sciences

A project-based course where students work under close faculty guidance and supervision on particular topics of interest. Grading is Ĥ, S, or U only.

# FSC 654

# Criminal Investigation Analysis: Profiling

Designed to help students acquire skills and knowledge in criminal investigation analysis. Students are introduced to various techniques used by criminologists and behavioral scientists to profile individuals that typically commit violent crimes. Includes study of victimology and crime scene analysis.

#### FSC 661 Internship in Forensic Sciences (1.5-9 quarter units)

An internship for students looking for field experi-ence in the law enforcement field. Students receive academic guidance from forensic science faculty and supervision at the field placement site. The intern-ship requires students to work a minimum of 300 hours under faculty and field supervision. Students must write an in-depth research paper on their experiences during the placement. This paper is coordinated and supported by the students' faculty advisor and field supervisor. Units are arranged and determined based on assignment and the number of hours at the placement site. Grading is H, S, or U only.

#### FSC 662

# Supervised Graduate Research Project

Forensic science students can undertake a research project once they have completed all courses in the program. The project is coordinated by full-time faculty and chaired by a FS faculty member chosen by the student from previous courses taken within the program. Students select a committee and a viable forensic science topic to research. Students meet once a week for two months with a committee member. Upon completion, students present the projects to the committee in an open forum that is open to peers. Grading is H, S, or U only. \* Students who do not complete the Research Project within the allotted time frame will need to retake FSC 662. No grade of "I" (Incomplete) can be given for this course.

#### FSC 690

# **Guided Study**

(1.5-9 quarter units)

Individual study under direction of the instructor. Requires prior approval of appropriate academic department. Grading is H, S, or U only.

# GER – Gerontology

# **GER 310**

Healthy Aging Focuses on the historical and cross-cultural, physiological, psychological, sociological, economic and political aspects of aging. Retirement patterns, living environments, chronic disease and the role of health care professionals will be explored.

# GLS – Global Studies

## GLS 310

# **Global Communications and Information Technology** (Prerequisite: ENG 240)

An analysis of the history, growth, use and future development of global communications and information systems. Examines the technological, social, political and economic forces that impact the evolution of electronic communications and information technology across the world (global) and around the world (regional and local).

# GLS 330

#### Film in an International Context (Prereauisite: ENG 240)

An examination of how the international cinema portrays various aspects of the societies and cultures represented in film. Emphasizes the film industries of a variety of countries outside the U.S. For example, representative films of Asia, Africa, Europe, Latin America, Australia and Oceania and Canada may be studied.

#### GLS 410

#### Gender Studies: Gender Identity in a Global Context

(Prerequisite: ENG 240)

An investigation into how the formation of gender identity is the building block for family life, social roles, political and economic participation and a host

of other factors that influence any group's participation in a global community. Topics include the distinction between sex and gender, the ways in which gender impacts education and work, the representation of gender in the media and the arts, struggles for equality between the sexes and the historical transformations of gender related to global political and economic factors.

#### GLS 420

# Ecological Revolutions: Economics, Technology and the Global Environment

(Prerequisite: ENG 240)

This course places contemporary ecological concerns in a global and historical context revealing how humans have fundamentally altered their relationship to the natural environment in the last 500 years. Topics include cultural conceptions of nature and non-human species, the value and use of resources in different societies, the consequences of various kinds of economic organization (particularly capitalism) on the environment and the impact of technological revolutions on the world's ecology.

### GLS 430

The Global Economy

(Prerequisite: ENG 240) Since World War II, the nature of international economic exchanges has changed significantly. Enormous changes in technology, urbanization, finance, markets, lending, the internationalization of both production and multidivisional firms, the organization of work, power relations between nations and world cultures are currently going by the name "globalization." This course examines the nature of those changes and the theories that try to explain them. Also looks at the consequences of and popular responses to, the new global economy.

# GLS 440

**Study Abroad** (*Prerequisite: HIS 320*)

During this one month elective course, students will travel as a class and spend two weeks studying in a foreign country. While the course topics will vary depending upon the country of destination and the instructor, the course offers focused study so students develop a genuine appreciation of another cul-ture. Through exercises, readings, and field trips, the course invites learners to take an active role not only in their own preparation for the study abroad experience, but for their personal, academic, and professional growth. This course demands from them a critical exploration of their beliefs, goals, and behaviors. The course covers personal development, learning about one's own culture, learning about another culture, professional development, and the rudiments of learning a foreign language. Each strand of development is addressed at the three crucial phases of the experience: before, during and after the sojourn abroad. The course lasts one month. It is the student's responsibility to find out about any additional fees, waivers, passports, immunizations and other requirements that may need to be fulfilled depending on the destination.

#### GLS 450

# **Global Studies Seminar and Portfolio Project**

(Capstone course. To be taken as the final course in the major.)

A seminar course that puts students in close contact with key faculty and with each other in forging connections between global culture, business economics and technology. Seminar topics vary. Students need to save all graded essays from required courses in the major for possible inclusion in their portfolio. The portfolio project is the capstone for the Global Studies major and should be of such quality that it can be shown to prospective employers or clients. Students can enroll only if they have completed more than half of their degree requirements. Grading is S or U only.

# HCA – Healthcare Administration

#### HCA 605

# **Evidenced Based Healthcare**

This course is designed to give the student a fundamental understanding of evidence based healthcare and its impact on clinical trials. Emphasis will be placed on qualitative and quantitative measurements of evidence including cohort studies, healthcare technologies, outcome measurements randomized and non randomized studies, data sets and trial outcomes.

# HCA 609A

# Healthcare Law, Policy, Politics and Ethics

An examination of current health care public policy and politics in the United States. Studies the role of federal, state and county government in the development of health care public policy and its impact upon health care facilities. An analysis of current legal issues that affect health care providers, administrators and other health care personnel. Reviews contract law as it relates to health care facilities.

# HCA 620A

Healthcare Management

An overview of health care management, including current issues in health care and theoretical basis for these current issues. Discussions of health care administration emphasizing organization, management, planning, communication, directing and controlling the practice of health care management.

### HCA 629

# Healthcare Finance, Budget and Managed Care

A study of effective management of the limited financial resources in health care industry. Focuses on the basic concepts and techniques of cost accounting, financial reporting, reimbursement, budgeting and financial controls and strategic financial planning. Also includes an examination of managed care structures including Health Maintenance Organizations (IPMOS), Preferred Provider Organizations (IPAS).

# HCA 634

# Program Planning, Strategic Planning and Evaluation

A survey of basic program planning from the conception of an idea to the implementation of the program. Explores the various program evaluation techniques. Emphasizes the value of teamwork in the learning process, as specific individuals will have responsibility for development of specific aspects of an actual program plan for a health care program in an organization.

# HCA 636

# Ambulatory Care Continuum

A study of various ambulatory care service components. With a shift from inpatient to outpatient services, this is the fastest growing component of the present non-integrated health care systems. Focuses on standards of accreditation and the issues involved in monitoring these proliferating services.

#### HCA 640

# **Biostatistics and Research**

An introduction to the use of statistical analysis in health care management. Provides an understanding of the basic methods and underlying concepts of statistics and research that are used in management decision-making. Among topics explored are descriptive statistics, probability, sampling, hypothesis testing and non-parametric statistics. Applications in health-related management and research are featured.

# HCA 641

# Eldercare - Issues into Practice

The aging of America continues to be an issue in the delivery of health care. This course is designed to explore the issues of eldercare, gerontology, legal

implications (including patient's rights), systems delivery and ambulatory care management. Discusses the role of administration in eldercare. An exploration into the physical, psychological and sociological aspects of caring for the elderly. This course is designed to provide the student with the option to sit for the State of California Licensing Examination for Administrators.

#### HCA 691A, B

Internship or Research Practicum

#### HCA 691A Module A: Internship

Module A includes a two-day seminar covering the preceptor role, the internship handbook, resume writing and other pertinent information to help the student be successful in their internship placement. Students will then be under contract with a University approved preceptor for their field health care management experience. The hours of these experiences vary depending on the needs and career focus of the student. Students will present a written report on their internships. At the end of the internship, the preceptor completes formal written evaluation of the students as defined in the preceptor's manual. Grading is H, S, or U only.

# HCA 691B Module B: Research Practicum

Module B includes a two-day seminar reviewing the research process, APA style and other pertinent information to help the student be successful in their research practicum. The student, with faculty advice, will select a topic of current issue in the health care field. The research practicum may be qualitative, quantitative, or both. Students will present both a formal written and oral presentation on their topic. Grading is H, S, or U only.

# HCM – Hospitality and Casino Management

#### HCM 400

**Principles of Hospitality and Casino Accounting** This course encompasses financial reporting systems, internal controls, managerial reporting and federal and state regulations that impact the accounting in a hotel, resort or casino environment. Students will gain hands-on experience in complying with GAAP and legal requirements of financial reporting in the hospitality and casino industries.

#### HCM 410

# Hospitality and Gaming Law

This course will examine the role that differing state and federal laws and regulations will play in the operation of hotels, resorts and casinos. The limitations and exceptions to these laws they apply to Tribal Lands will be assessed. It provides the essential information that managers need to comply with the law and to develop preventative tactics to avoid lawsuits.

#### HCM 420

# Hospitality and Casino Marketing

This course will examine the application of the traditional marketing functions to the areas of the hospitality and casino industries. Students will develop plans for the use of convention and promotional events as marketing tools.

### HCM 430

# Principles of Hospitality and Casino Staffing

This course addresses the planning for the management of personnel, including the recruitment, selection, and evaluation of employees in the hospitality industry. Job analyses and descriptions developed and government regulations examined.

#### HCM 440

# **Cultural Diversity and Hospitality Management** This course is designed to discuss the importance of

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cultural awareness and sensitivity in effective human resources management practices in the hospitality industry. The course examines the increasing cultural diversity found in both the consumer and employee populations and how managers can address different cultural needs of the relevant populations.

# HCM 450

# Native American Tribal Community Development

This course is an introduction to the issues and concepts of the Native American community and economic development. Discussion of the positive and negative impacts of casinos on the lives of tribal members, as well as on the community relations with the non-tribal community will be examined.

# HED – Health Education

# **HED 100**

# Personal Health

Designed to assist individuals to establish health behaviors for optimal physical, emotional, and sexual health and maintain a healthy environment.

#### **HED 110** First Aid and CPR

Focus is on how to recognize and act in an emer-

gency. Strategies to maintain life until professional help arrives will be included. The 2005 national suidelines for breathing and cardiac emergency including CPR, choking and using an automated external defibrillator (AED) will be discussed. A National Safety Council completion card for CPR and First Aid will be available at successful completion of the course.

# HED 212

# Nutrition and Fitness

Focus is on how nutrition relates to health. The function of nutrients including micro nutrients will be discussed. Provides a basic understanding of nutrition and fitness as it relates to health promotion and health education.

# **HED 220**

### Health, Nutrition and Safety

(Prerequisites: PSY 100 and ECE 201) Focus is on the eight components for coordinated health for young children in out-of-home care. Health, physical education, health and nutrition services, health promotion for the staff, counseling and psychological services, a safe healthy environment, and family involvement, and community resources and personnel will be addressed. Attention will be directed towards children with special needs and challenging behaviors as well as legal and ethical issues in the field of early childhood.

#### **HED 300**

# Foundations of Health Education

(Prerequisites: Preparation for the major) Focus is on a practical guide to community health methods. Topics include an introduction to concepts and theories of health education, promoting health in a multicultural society, health communication, social marketing, facilitation of support groups, and how to build and sustain coalitions and other topics.

# **HED 308**

### Mental and Emotional Health

The focus is on the relationship between the mind and the body and how attitudes and emotions affect health and well-being. Anger, depression, anxiety, and the negative effects on health will be explored in addition to how positive emotions such as humor and optimism can improve health and longevity. The importance of health choices and lifestyle factors on overall health and well-being will be explored.

# HED 310

# Health Literacy

Focus is on the health literacy crisis in the United States and around the world. The critical role of literacy in community health is explored and a promotional model that bridges the gap between health education, health promotion, and health communication will be presented.

# **HED 321**

**Behavior Change** The focus is on integrating health behavior change strategies into disease management practice. The role of the health educator in assisting clients to manage their own health will be explored. Improving outcomes in health promotion and dis-ease management will be explored.

# **HED 340**

# Health Counseling

The focus is on health counseling for health problems such as HIV, chronic disease and STDs. Counseling is broken into discrete skills and related to the 10 leading health indicators in Healthy People 2010. Counseling is related to the individual and how the health educator can address them as they work with clients.

# **HED 350**

# Introduction to Coordinated School Health

The focus is on the components of a coordinated school health program. The relationship between school health and community health and the impor-tance of evidence-based strategies to improve children's health will be explored.

# HED 400

# Drug Use and Abuse

The focus is on the impact of drug use and/or abuse on people and drug related problems in society. Biomedical, sociological, and social-psychological views of drug use will be explored. In addition, illicit drugs, non-prescription, prescription and herbal drugs will be examined. Drug abuse preventive programs will be stressed.

# **HED 408**

# Human Sexuality

The focus is on the dimensions of human sexuality. Sexual communication, male and female anatomy and physiology, gender, sexual response, contraception, pregnancy, sexual techniques, sexual orientation, sexual disorders, and sexually transmitted dis-eases among other things will be discussed.

#### HED 412

#### Violence Prevention

The focus is on the impact of violence victimization in everyday lives of children, adolescents, and adults from a developmental perspective. Brain development will be discussed as it relates to violence and mental health. Evidence-based strategies to prevent bullying and violence will be explored.

# HED 415

Stress and Coping The focus is on the different types of stress, the theories underlying the body response to stress, and the mind and body connection. Specific coping strategies and relaxation techniques will be explored.

# **HED 420**

# Human Disease

The focus is on the history of infectious and non infectious diseases, the principles of occurrence, and the body's defenses. The role of the health educator will be explored. Bacterial, viral, and parasitic as well as chronic disease and disorders such as cardiovascular, cancer, respiratory, digestive, genetic, and endocrine will be discussed.

## **HED 424**

Need Assessment Strategies for Health Education The focus is on needs assessment strategies that can

be utilized with individuals, families, and communities. Self-assessment inventories will be included.

# **HED 494**

# Health Education Capstone Project

(Prerequisites: Completion of 40 quarter units of required coursework)

This two-month capstone project undertaken by health education students when they have completed the core courses in the program provides an opportunity for the student to implement one or more of the teaching plans or assessment designed in the core courses. Results will be reported orally and in written form. Students will also design and participate in a collaborative service learning experience in a community, school, ambulatory, home or health care setting. Students are required to com-plete 100 hours of service learning in the community in a health education role under the supervision of a preceptor. Students will complete the portfolio of their work from core courses and revise as needed to create an impressive final portfolio that can be used... Students who do not complete the project within the two-month period are eligible to receive a grade of "I" with a maximum of a one-time, six-month extension. Grading is H, S, or U only.

# **HED 600**

# Models and Theories of Health Education

Focus is on the main theoretical concepts and models in health promotion. The significance, practical application and impact of the theories on individual, families, and communities will be explored.

# **HED 602**

# Introductory Health Education: K-12

An introductory study of a coordinated school health program including: comprehensive health education, health services, a healthy and safe school environment, physical education, nutrition services, physiological and counseling services, health promotion for staff, and family and community involvement. Health problems and issues are addressed at developmentally appropriate grade levels (K-12) using the Health Framework for California Public Schools in the following areas: mental and emotional health, personal health, consumer and community health, injury prevention and safety, alcohol, tobacco and other drugs, nutrition, environmental health, family living, individual growth and development and communicable and chronic diseases. The legal responsibilities of teachers related to student health and safety will be explored. Effective communication with parents and site-based and community resources to meet the individual needs of students, research-based school health programs, life skills and positive behaviors, needs of special populations, and evaluation of health web sites will be discussed. This course meets credential requirements.

# **HED 610**

# Healthy People and Preventive Services

Focus will be on Healthy People 2010and evidence-based strategies for preventive services. The role of the health educator in assisting individuals, families, and communities in meeting objectives of state and national programs will be explored.

# **HED 615**

# Health Education Program Planning

Focus will be on use of intervention mapping, a theory-based interactive process that links needs assess ment with program planning to improve outcomes. Needs assessment, matrices of change objectives, practical strategies, and planning for evaluation will be explored.

# **HED 620**

# **Coordinated School Health Programs**

An advanced health education course focusing on coordinated school health, comprehensive school health programs, and how to plan, implement, coordinate, and evaluate a health education curriculum within a comprehensive school health system. A

comprehensive school health system includes health and physical education, health services, nutrition services, psychological and counseling services, a safe and healthy environment, and health promotion for staff, parents, and community. Meets the CTC requirements for advanced health education for the professional clear credential.

# HED 625

# **Contemporary Issues in Health Education**

Focus will be on linking statistical methods to health education, the parameters of health education, community health education, international health and research on public health issues. In addition, current issues in health education will be explored.

#### HED 630

# Program Evaluation in Health Education

Focus is on planning and design, implementation, and evaluation of culturally competent health education programs. In addition, creating and teaching evidence-based materials and publicizing the program will be explored.

# HED 640

# **Coalitions and Partnerships**

Focus is on the theoretical and practical implementation of coalitions and partnerships and how to sustain and maintain these organizations. In addition, preventing or ameliorating a community-defined problem, gathering data and assessing the need, developing an action plan, implementing solutions, and researching community-level outcomes will be explored.

# HED 650

# Health Promotion Management

Focus is on organizational theories and dynamics, legal and ethical issues, personnel management, budgeting, grant writing, marketing and the media, and technology and information systems. Fundamentals of leadership and management for the 21st.Century will be explored.

# HED 680

# Community-Based Research

Focus is on the introduction to research and the research process. Critique of quantitative and qualitative published research, research design and how research contributes to the improvement of health education and health prevention programs are included.

# HED 685

### Internship in Health Education

(Prerequisite: Must be taken as one of the last 2 courses in the program of study)

The internship will be 90 hours of field experience utilizing the knowledge and skills learned in the program. The experience may be in the community, acute care facility, clinic, or school. Students will be under contract with a University approved preceptor for their internship in health education and health promotion. Students will complete the portfolio of their work throughout the program and revise as needed to create an impressive final portfolio that can be used. Grading is S or U only. Course is eligible for an In Progress (IP) grade.

## HED 690

# **Research Capstone Project**

(Prerequisite: HED 680 Community-Based Research) Two-month course meets once a week. Students' work on an original and significant project that integrates concepts, principles, and evidencebased strategies taught throughout the program. Students design, implement, and evaluate evidencebased health education program designed for individuals, families or community. Grading is H, S, or U only. Course is eligible for an In Progress (IP) grade.

#### HED 694 Thesis

(Prerequisite: HED 680 Community-Based Research and an undergraduate or graduate statistics class) This is a supervised experience culminating in the completion of a thesis. Two-month course meets once a week. May continue up to 12 months with an "IP". Grading is H, S or U only. Course is eligible for an In Progress (IP) grade.

# HIS – History

#### HIS 220A

#### History of the United States I + (Prerequisites: ENG 100/101)

A survey of American historical development from pre-colonial times through Reconstruction. Explores the wide variety of economic, political, social and cultural factors that shaped the origins of the nation, including the Revolution, the Constitution and the Civil War. Special attention is paid to issues of race, class, gender and ethnicity. Includes study of the Constitution.

# HIS 220B

# History of the United States II + (*Prerequisites: ENG 100/101*)

A survey of American historical development from the Reconstruction era to the present. Explores the wide variety of economic, political, social and cultural factors that shaped the development of the nation, including industrialization, America's emergence as a world power and the challenges of the late 20th century. Pays special attention to issues of race, class, gender and ethnicity. May involve work in oral history.

#### HIS 233

# World Civilizations I

(Prerequisites: ENG 100/101) A discussion of how the distinctive cultures, economies and societies of the world developed from prehistoric times up to the European conquest of the Americas (ca. 1500 C.E.). Explores issues of gender, class, personal identity, love, war, imperialism, sexuality, citizenship, religion, urban life and ecology as they pertain to the ancient civilizations, classic civilizations and post-classical (medieval) civilizations in Asia, Africa, the Americas and Europe.

# HIS 234

# World Civilizations II (Prerequisites: ENG 100/101)

An explanation of how the cultures, economies and societies of the world developed through the interaction of diverse peoples and civilizations since 1500 C.E. Examines the era of the European Renaissance and such civilizations as Ming China, Mughal India, Ottoman Turkey and Aztec Mexico. Explores issues of class and class conflict, personal and cultural identity, race, work, industrial development, colonialism, ecology and political and economic life to explain the development of the modern world.

# HIS 300

#### Foundations of Western Civilization (Prerequisites: ENG 100/101)

Explores the important social, material, cultural, and intellectual bases of European civilization and situates them in relation to other major Afro-Eurasian civilizations. Examines hunting-gathering and early agricultural societies, Mesopotamian and Egyptian civilizations, the Hebrew, Greek and Roman worlds, the origins and spread of Christianity, the nomadic invasions of Europe, Europe's Byzantine and Islamic legacies, and the medieval European synthesis of Greco-Roman and Germanic heritages.

#### HIS 320 Culture, Capit

# Culture, Capitalism and Technology in Modern World History

(Prerequisites: ENG 100/101)

Places contemporary cultural, economic and technological issues in a global and historical perspective.

# **Course Descriptions**

Shows how major issues that concern us today are rooted in the experiences of world civilizations since 1500. These issues include the rise of capitalism, industrialization and commodity production and their diffusion over the world; the pace and nature of technological change; the role of culture in directing economic and technological change; and the impact of capitalism on working life, the natural world, cultural diversity and cultural identity. Examines the ways that capitalism, culture and technology have interacted over the past 500 years to shape the places, peoples and societies that have come to exist in the modern world.

#### HIS 325

## Peoples and Places: Migration in Modern World History

# (Prerequisites: ENG 100/101)

Human migration is the story of individual lives enmeshed in larger historical issues of identity, culture, work, social institutions and various forms of coercion. Explores how work and migration have intersected in the last 500 years to shape the world in which we live today.

# HIS 339

#### **History of the Middle East 600-1600** (*Prerequisites: ENG 100/101*)

A comprehensive examination of the history of the Middle East from before the rise of Islam in the early seventh century CE to the Muslim conquest of Constantinople in the mid-fifteenth century. Included will be the life style of the desert nomad, Muhammad and the founding of the Islamic state, its expansion over most of the Middle East and beyond, and the various non-Arab dynasties and empires that took over.

## HIS 341

History Through Theater

(Prerequisites: ENG 100/101) An exploration of history through the complex medium of theater. Focuses on a variety of dramatic and theatrical techniques, including readers' theater, role-playing debates, improvisation and formal dramatizations. Students study plays in order to gain a broader understanding of key historical issues in diverse cultures and script historical literature into performances.

## HIS 342

# **Modern History of the Middle East** (*Prerequisites: ENG 100/101*)

Presents the history and civilization of the modern Middle East (West Asia and North Africa) since about 1600 C.E. Investigates the historical roots of present day events by examining the history of the region, pre-modern empires, the European colonization, and the renaissance of the Middle East culture in the 18th and 19th century. The course concludes with independent states and the emergence of Pan-Arabism and Islamist ideologies of the 20th century.

# HIS 345

#### History and Cultures of Latin America (*Prerequisites: ENG* 100/101)

An introduction to important issues in Latin American history and culture focusing on the diversity of Latin American societies and their multicultural heritage. Topics may include the impact of colonialism on indigenous societies, the growth of plantation and mining economies, the capture and enslavement of Africans, the struggle for independence, the distribution of political power, the recurrence of popular rebellion and the creativity of artistic and cultural life.

# HIS 346

# Chinese History and Culture I

(Prerequisites: ENG 100/101) A historical overview of Chinese civilization from its Neolithic origins to the founding of the Ming Dynasty. The foundations of Chinese civilization and the core of Chinese culture will be elucidated

through a focus on key aspects of governance, economy, foreign relations, literature and the arts, and their development during this period.

#### HIS 348

# History and Cultures of Asia

(Prerequisites: ENG 100/101)

A critical overview of contemporary Asian history and culture focusing on the diversity of Asian societies. Emphasis is determined by the instructor and will include an in-depth examination of one of the following countries or areas: China, Japan, India, Korea, Taiwan, Southeast Asia, Thailand, Tibet and the Philippines. Topics may include the distribution of political power throughout the regions, ideological and structural stratification between the east and the west, the impact of "Orientalism" in a global context, the impact of Imperialism on indigenous communities, the effects of sexual and religious stratification, the impact of sex tourism and the repression of ethnic, political and religious differences throughout and within different regions of Asia.

### HIS 349

**History and Cultures of Africa** (*Prerequisites: ENG 100/101*)

A critical introduction to the study of African society, culture and history. Explains the sources of African culture, politics and intellectual development, as well as modernization and social change in contemporary African societies. Examines social, economic and intellectual movements including issues of colonialism, post-colonial independence, underdevelopment, genocide, gender inequality, AIDS, the politics of international relief agencies and new forms of art and literature. Provides an overview of Africa both as a geographic location and as a Western idea, with additional emphasis on regional variations and multicultural differences within the continent.

# HIS 350

Cultural Diversity +

(Prerequisites: ENG 100/101) An examination of race, gender, ethnicity and class in 20th century American society. Introduces students to methods for studying the changing nature of U.S. society and explores ways in which an increasingly urbanized and technological culture affects all aspects of professional, skilled and unskilled work. May involve work in oral history.

#### HIS 355

# Chinese History and Culture II

(Prerequisites: ENG 100/101)

China has existed and expanded as a unified cultural and political entity with relatively brief interregnums between dynasties/regimes since the fourteenth century. It is during this unprecedented era of unity that China's first direct contacts with the West occurred, and these have had a great influence on how China and its citizens perceive themselves. Emphasis shall be placed on an understanding of the continuing impact of the Opium Wars during the nineteenth century, WWI and WWII in Asia, and the Civil War between the Communist and National parties from the 1920s to the 1940s. Also of key importance is an understanding of the influence of the importation of Western ideas with regards to ideas about nationalism, democracy, science, evolution, and Marxism-Leninism, as well as literature and culture in general during this period.

# HIS 360

# The American Colonial Experience, 1584-1783

(Prerequisites: ENG 100/101 and HIS 220A) This upper-division course examines the various peoples and the economic, environmental, cultural, and political forces that shaped American development from the period before Europeans settled through the American Revolution. It evaluates key ecological changes after 1500 and the shaping of North American colonial society by mercantilism, merchant capitalism, and the slave trade. In addition, the course analyses the results of the encounter between peoples of the old and new worlds, the regional patterns and cultures of colonial society, and their implications for the future American nation. It identifies sources of conflict and change throughout the colonial era and explores the economic and political problems that contributed to rebellion and the drive for independence. Major emphasis will be given to the recurrent movement of people as a defining characteristic of American experience.

# HIS 361

# The Making and Sundering of the United States, 1783-1865

(Prerequisites: ENG 100/101 and HIS 220A) This upper-division course considers the development of American society from the early national period through the Civil War. It will begin with an analysis of the problems of creating a national government and the relationship between economics and politics in framing the United States Constitution. It will explore the process and logic of westward expansion to the Pacific and the conflicts that occurred as affected peoples and societies responded in a defense of their cultures. A prominent element will be an examination of U.S. economic development and its meaning for the growth of sectional identities and distinctiveness. It will also explore the growth of the plantation system and slavery and the corresponding political empowerment of planter capitalists. It will evaluate the social, political, and military problems faced by the contending sides in the Civil War.

#### HIS 362

# The United States between Wars, 1865-1917

(Prerequisite: English 100/101 and History 220B) This upper-division course investigates the transformation and expansion of America and American influence from the end of the Civil War up to World War I. The issues evaluated include the problems of postwar reconstruction; demographic and economic expansion into the western territories; the process of industrialization and the attendant consequences for labor and social relations; mass immigration; the growth of American imperialism; the socialist, populist and progressive movements; and World War I and Wilsonianism. It includes an evaluation of the strains upon laissez faire capitalism with the growth of economies of scale and the resultant expansion of international financial and market networks

# HIS 363

# The United States Since World War I

(Prerequisites: ENG 100/101 and HIS 220B) This upper-division course explores the social, economic, cultural and political contours of modern America from 1917 to the present. Major attention is given to the factors and developments contributing to economic disorder, cultural shift, and social transformation. These include the crisis, collapse, and restructuring of the capitalist order in the 1930s, the social fluidity that accompanied mobilization for World War II, the affluence and anxieties of the early postwar period, the civil rights and protest movements of the 1960s, and the international and domestic challenges the U.S. faced as it attempted to structure a new global political economy in the 1970s and after. The course includes an evaluation of the role of American interest and power in establishing an international system in the aftermath of Cold War bi-polarism.

### HIS 370

# **History and Cultures of the American Southwest** (*Prerequisites: ENG 100/101*)

An examination of what has attracted people to the Southwestern United States over the last thousand years and how people have changed and enriched the region with their diverse cultural, social and economic contributions. Places race relations, immigration issues and environmental concerns, resource use, cultural beliefs, gender roles, public order and working life into historical perspective. May involve work in oral history.

# HIS 375

# **Nevada History, Government, and Constitution** (*Prerequisites: ENG* 100/101)

Through an historical and literary approach, this course examines the history of the state of Nevada from the Native peoples to the present. Includes a component on Nevada Constitution required for graduation from all Nevada colleges and universities

# HIS 385

#### **History and Culture of the Hawaiian Islands** (*Prerequisites: ENG 100/101*)

Through an historical and literary approach, this course examines the history and culture of the Hawaiian islands from the Polynesian migration to the present

# HIS 400

# **History and Historians: Theories and Methods** (*Prerequisite: ENG* 240)

This course investigates the important methodologies and theories of history that buttress contemporary historical scholarship. Instead of being a general introduction to historiography, the course focuses on the philosophical foundations of historical practice today. We will read historians who reflect critically on their historical assumptions and the historical framework of their interpretations. In the process of reading these historians, this seminar will examine twelve major theoretical frames that powerfully influence contemporary historical scholarship.

# HIS 410

# The California Experience

(Prerequisites: ENG 100/101)

Through an historical and literary approach, this course examines the interaction of the hopes and dreams of the peoples of California from the arrival of the first peoples to the post-World War II boom. May involve work in oral history.

# HIS 420

# The Civil War

(Prerequisites: ENG 100/101) An examination of the dynamic convergence of economic, geopolitical and racial factors that contributed to the most explosive conflict in U.S. histo-

sequent American historical development.

ry. Focuses on the consequences of the war for sub-

# HIS 431

# The Ancient World

(Prerequisites: ENG 100/101 and HIS 233) This upper-division course investigates major issues in ancient world history from roughly 5000 B.C.E. to roughly 500 B.C.E. Topics examined include the Neolithic revolution; the rise of settled agriculture, complex societies and organized states in Mesopotamia, the Nile Valley, the Indus Valley, the Yellow River Valley, the highlands and lowlands of Mesoamerica, and the Andes; the Indo-European and Bantu migrations; the rise and decline of great powers in North Africa, Southwest Asia, and East Asia; and the formation of Aegean civilization in Greece. Examining these topics, the course will stress issues of gender, class, religion, as well as urban life and rural social relations in Asia, Europe, Africa, and the Americas. One of the chief emphases of the course will be the interpretation of primary sources.

# HIS 432

# The Classical World

(Prerequisites: ENG 100/101 and HIS 233) This upper-division course focuses on important issues in world history from roughly 500 B.C.E. to roughly 500 C.E., a seminal period called the Classical Age. Topics examined include Classical Greek culture and influence; the Hellenistic world ecumene; religious and philosophical innovation (Socrates, Confucius, Buddha, Zoroaster, Christ); the

unification of the Mediterranean world under the Roman Empire; the unification of China under the Qin and Han dynasties; the unification of India under the Mauryan Empire; the culture of Roman, Han and Mauryan societies; the decay and fall of the Roman, Han, and Mauryan empires; and the rise of important regional states like Meroe and Aksum in northeast Africa, Angkor in Cambodia, and Teotihuacán and the classical Maya city-states in Mesoamerica. Major emphases of the course will be the seminal nature of classical civilizations and the construction of historical interpretation through the analysis of primary sources.

#### HIS 433

The Post-Classical World

(Prerequisites: ENG 100/101 and HIS 233) The post-classical world (ca. 500 C.E. to ca. 1500 C.E.) laid the foundations for our modern world. A list of those foundations include the expansion and subsequent collapse of Byzantium; the nomadic invasions of western Europe and the development of feudalism; the rise of a militant Christianity under Charlemagne and the later Crusades; the rapid geographic dispersion of a militant Islam; the diffusion of Indian classical culture to Persia and Southeast Asia; the reunification of China under the Sui and Tang dynasties, the commercial revolution of the Sung dynasty, and the cultural revival of the Ming dynasty; the warfare and territorial organization that characterized Japanese feudalism; the development of states in eastern and southern Africa; the urban civilizations of Mesoamerica; and the settlement of the Polynesian peoples throughout the Pacific. Examining these topics, the course will stress issues of gender, class, religion, and social change in Asia, Europe, Africa, the Americas and Oceana. The course will explore the historiography of the era in depth.

#### HIS 434

# The Modern World, 1500 to the Present

(Prerequisites: ENG 100/101 and HIS 234) The world has changed remarkably since 1500. In this course we will explore some of the more impor-tant transformations. They include the colonial expansion of Europe from 1500 to 1750; the transformation of Europe and the Atlantic world from 1500 to 1770 under the impact of the slave trade and the later triangular trade; the rise and fall of Islamic empires of South and Southwest Asia; the emergence of new regional powers in Eurasia (Russia and Japan); the political and social revolutions in the Atlantic world from 1770 to 1825; the industrial revolution and the creation of a new imperial order around the globe after 1825; political and social revolutions in Eurasia and Latin America from 1900 to 1949; global wars and their political, social and eco-nomic consequences; national liberation movements and the decolonization of Africa and Asia; the rise and fall of a bi-polar world; and the crises and realignments of the post-Cold War world. The course will highlight questions of race, class, and gender in these transformations and it will emphasize the integration of primary sources into an interpretive framework created by students.

# HIS 490

# Guided Study

(1.5-4.5 quarter units) Individual study under direction of instructor. Requires prior approval of appropriate academic department.

### HIS 499

# **Capstone Research Project**

(Prerequisite: ENG 240 or equivalent, HIS 400, and completion of 31.5 quarter units of core courses in the major) This seminar is the capstone course for the history major. The objective of the capstone course is to produce a paper that is exemplified by extensive research, critical thought, and intellectual engagement. The project should excite students and deepen their historical understanding. As a "senior project," it will combine primary sources with secondary interpretations in an original and interesting way.

# HLT – Health

# HLT 200

# Introduction to Finance and Accounting (Prerequisites: MNS 205)

This course is intended to introduce the student to the financial management of healthcare organizations. The basics of accounting and finance as it relates to emerging issues in healthcare financial management will be discussed. To understand financial management in healthcare settings, one must first understand the fundamentals of finance. The student is introduced to the basics and implications of accounting data and how financial statements are constructed. Healthcare organizations must generate cash flow, generate assets and put those assets to work just like any business enterprise. This course is intended to explain the major reasons that financial management in healthcare organizations is unique among industries.

# HLT 210

#### Quality in Healthcare This course will introduce the student to the fundamentals of quality in healthcare. It will provide the student with an integrated approach to undertaking ways of evaluating and improving healthcare delivery. It will provide tools, techniques and principles of Total Quality in the healthcare industry. It will provide a platform for discussions of case studies of major health facilities where Total Quality is implemented.

#### HLT 220

#### **Healthcare Information Systems** (*Prerequisite: ILR* 260)

Healthcare Information Systems is designed to provide the student with a strong foundation to comprehend the content and structure of the daily operations of health services. Among the topics discussed in this course are trends in healthcare information processing, communications technologies and utilization of information technology in the healthcare industry. The course will include internet and intranet applications and the use of information technology for medical quality assessment.

#### HLT 230

#### **Organizational Behavior** (*Prerequisite: MTH 210*)

The course is intended to help potential managers develop people skills. It focuses on the behavior of the organization as a function of individual and group emphasizing the importance of motivation and leadership. It will include a foundation of organizational behavior, foundation of individual behavior, values, attitudes and job satisfaction, individual decision making and its implications for managers. The course also includes a presentation of basic motivation concepts and its applications to an organization. Topics on understanding work teams, the communication process and its application in interpersonal communication and organizational communication are also part of this course.

# HLT 240

# Marketing in Healthcare

This course will provide an overview of marketing and its application to healthcare. It will introduce the student to marketing concepts, methods, and data used in healthcare marketing. It will develop in the student an appreciation of the role of marketing in healthcare along with tools necessary to plan and implement marketing initiatives. The course will also introduce to the student the nature of healthcare markets, the consumers within this market and the factors that influence the demand for health services.

# HLT 250

#### **Healthcare Management and Leadership** (*Prerequisite: HLT 230*)

The emphasis of this course is the application of

organizational behavior theory studied in HLT 230. Emphasis is placed on the managerial activity involving motivation, leadership, conflict management and negotiation. Healthcare Management and Leadership will introduce the importance of leadership in relation to various issues in healthcare. The course will also include several aspects of leadership in health services organizations.

# HRM – Human Resources Management

#### HRM 409B

#### Survey in Human Resources Management and Organization Development

The course provides an overview of human resources management and organizational development activities including employment, interviewing, career systems, compensation, benefits, training, organizational change, performance evaluation, discipline and employee assistance, labor relations, affirmative action and equal employment opportunity considerations, and health and safety.

#### HRM 432

# Recruiting, Selection, Promotion, and Retention

This course is designed to explore all aspects of reviewing the strategic direction of an organization and how it relates to assessing and filling jobs, from initial hiring through subsequent placement, promotion, and retention. It will include techniques for determining staffing needs, recruiting, screening, assigning, evaluating, assessing, and promoting. An exploration of options for employee development and retention in changing economy is provided. Also reviewed are special concerns regarding regulations, employee attitudes, and union representation.

#### HRM 433

# Pay and Benefit Administration, and HR Technology

This course reviews the fundamentals of wage and salary programs, including the development of job descriptions, performing job evaluations, conducting salary surveys, adjusting pay structures, considering are differentials, and relating pay to performance. Benefit programs and related employee incentive and service programs are also covered. Ways to link performance to both monetary and non-monetary rewards will be reviewed, including profit sharing, bonus plans, stock options, awards and special rewards for managerial personnel. Legislative restraints and tax treatments are discussed and behavioral theories are highlighted as they apply in this area. The incorporation of technology as it relates to Human Resource Management Systems that increases efficiency in pay, benefits administration, and aligning HR with organizational activities are also covered. The synthesis of pay, benefits administration and HR technology integrates the selection, development and administration of practical programs and systems for attracting, motivating, and retaining human resources.

#### HRM 439

# Legal, Regulatory, and Labor Relation Concerns in HRM

An introduction to the wide spectrum of legal and regulatory concerns that human resources managers face in the workplace (EEO laws, affirmative action, compliance requirements, prevention of employment-related liability). The course ties in the development, aims, structure and function of labor and employer organizations, examines the relationship of labor and management, and bargaining and resolution of employer-employee issues.

# HRM 630

# Legal, Ethical, and Safety Issues in Human Resource Management

A comprehensive analysis of the laws and regulations, both federal and state, that impact human resources management. The course emphasizes **Course** Descriptions

equal employment opportunity affirmative action, health and safety, privacy of information and methods of liability prevention in employment matters. Integrated into the course are aspects of ethical considerations as related to Human Resources Management, including employer use of power, organizational business practices, and safety concerns.

#### HRM 633A

# Seminar in Employee Relations, Labor Relations and Union Management

The course provides students with both the day-today realm of common and complex issues related to human behavior in the workplace as it relates to employee relations, and an examination of relationships among unions, workers, management an the government. The course assesses legal restraints (i.e., negotiation, contract administration, decertification) and preparations and techniques for dealing with negotiations, strikes, and lock outs, as well as grievance handling and arbitration.

#### HRM 637 Workforce Planning, Development and Outsourcing

A comparison and evaluation of planning, organizing, directing and monitoring of human resources planning processes, including recruiting, selecting, placing and integrating individuals within organizations. A key aspect of the course is the selection process (testing and assessment of skills and traits that influence work performance), employee orientation and integration (employee development and career planning), and aspects of performance management. The course also covers current trends in employee outsourcing.

# HRM 660

# Theory and Practice of Human Resource Management

A comprehensive management/practitioner-level overview and appraisal of current practices, trends, and applied theory in the era of strategic alignment between employees, jobs, systems, technology, policies, procedures, training, and organizational development. Students will evaluate and analyze theory as it relates to practical application in the workplace.

#### HRM 667

# **Compensation and Benefits**

This course provides an overview of the latest technology as it applies to the human resources function and its impact of human resource management administration and organizational development. The course also integrates and assesses fundamental aspects of wage, salary, benefit administration, and employee rewards and incentives as they are becoming increasingly supported by automated systems.

#### HRM 669

### Research Seminar in Human Resource Management Corporate Strategy

This course is focused on a selected combination of published empirical research and current topics in corporate strategy and human resource management. Articles for evaluation, comparison, and analysis will be drawn from journals and popular press in several fields, including economics, the behavioral sciences, management science, business administration, and elsewhere as they relate to the field of Human Resource Management. Faculty will guide students through written review of research and current practices, and seminar discussions in order assist the HRM Professional serve as a consultant to company management.

# HRM 670

# Project/Thesis

The project course offers an opportunity to work individually or with a team under the guidance of an assigned faculty member. Students clarify research topics and identify data sources in preparation for the project. Students gather data and present their research in both written and oral form to faculty and classmates. This course lasts two months and encompasses integrating critical components and learning experience into a deliverable that meets academic guidelines for program completion and may be applicable to the workplace to build a student's portfolio. Grading is H, S, or U only. Course is eligible for an In Progress (IP) grade.

# HSC – Health Science

#### HSC 300

# Legal and Ethical Issues and Health Professions

(*Prerequisites: Preparation for the major courses*) Focuses on legal and ethical concepts, principles of ethics and law and use in resolving ethical conflicts and dilemmas in health care. Scope of practice, informed consent, employee and patient rights and responsibilities, patient abuse, and the influence of finance and corporate culture will be explored. Sample cases will be analyzed.

# HSC 310

#### **Issues and Trends in Healthcare** (*Prerequisite: HSC 300*)

A history of the U.S. health care delivery system will be explored to understand the current issues and trends. The changing roles of the components of the system as well as technical, economic, political, and social forces effecting change will be discussed. Inpatient, outpatient, and long term care will be explored.

# HSC 330

# Health Education and Health Promotion

Focuses on health education, health promotion and clinical preventive services. Strategies for counseling and education, health education theories and practices, and development of learner-centered instructional strategies will be explored. The cost-effectiveness of clinical preventive services will be discussed.

# HSC 400

#### **Management for Health Professionals** (*Prerequisite: HSC 310*)

Focuses on planning, organizing, decision-making, staffing, leading or directing, communication and motivating health care personnel. Evolving trends in management, classic management theories, budget preparation and justification, training design and labor union contracts are explored.

# HSC 410

#### **Informatics for Health Professionals** (*Prerequisite: HSC* 400)

Focuses on the role of informatics in contemporary health care. Wireless and mobile computing, maintaining data integrity, information security and confidentiality and HIPAA, telehealth, and electronic health records (EHR) will be explored.

# HSC 420

# Allied Health Research

(Prerequisite: NSG 322)

Focuses on reading and conducting research in health and human performance. Research approaches and procedures will be explored. Examples of various research methods and techniques will be discussed. A research proposal will be developed.

# HSC 430

# **Case and Outcomes Management**

(Prerequisites: HSC 410 and HSC 420) Focuses on case and outcomes management application to clinical practice. The case management and outcomes management processes, barriers, utilization review, legal and financial aspects of each and evidence-based healthcare will be explored.

# HSC 440

# Allied Health Capstone Project

(Prerequisites: Completion of the major requirements) This two-month capstone project undertaken by allied health students when they have completed the core courses in the program provides an opportunity for the student to complete the outcomes management project proposal developed in HSC 430. Results will be reported orally and in written form. Students will also design and participate in a collaborative service learning experience in a community, ambulatory, home or health care setting. Students will complete the portfolio of their work from core courses and revise as needed to create an impressive final portfolio that can be used. Grading is H, S, or U only.

# HTM – Healthcare Technology Management

# HTM 605

# Healthcare Information Technologies

This course is designed to give the student a fundamental knowledge of evolving healthcare informatics and wireless healthcare delivery. Emphasis will be placed on the synergy between information systems and medical services with a focus on the improvement of medical standards and reduction of healthcare cost. Students will receive a comprehensive view of new and evolving e health and the rapid changes I n healthcare delivery models due to the rapid improvement in healthcare information delivery. Informatics, e health and wireless response to the growing healthcare disease and delivery market will be explored.

# HUB – Human Behavior

#### HUB 301

# **Behavioral Science**

(*Prerequisites: ENG 100/101 and PSY 100*) A study of the application of human behavior and behavioral science principles to the practice of management.

# HUB 400

# Group Structure and Dynamics

(Prerequisites: ENG 100/101 and PSY 100) An analysis of behavior, perspectives and practices as applied to group dynamics. Focus on approaches and skills in group dynamics as they relate to performance and enhancement of cooperative/collaborative effectiveness. Uses practice through role-playing of effective techniques in dealing with a variety of cooperative/collaborative situations.

# HUB 401

### **Conflict Resolution** (Prerequisites: ENG 100/101 and PSY 100)

A focus on the process of negotiation and conflict resolution. Gives special attention to conflict within and between persons in organizations and industry. Emphasizes application of techniques to conflict resolution situations via role-playing.

# HUB 410

# Psychology for Managers

(Prerequisites: ENG 100/101 and PSY 100) A survey of psychological concepts applied to organizational settings. Emphasizes motivation, communication, leadership, and personal development.

# HUB 420

#### Human Communication (Prerequisites: ENG 100/101 and PSY 100) A study of the theoretical and practical aspects of interpersonal and group communication.

# HUB 440

# Organizational Development

(Prerequisites: ENG 100/101 and PSY 100) A study of human relations and its relationship to organizational effectiveness through planned change and technological development.

# HUB 490 Guided Study

#### (1.5-4.5 quarter units)

Individual study under the direction of an instructor. Requires prior approval of appropriate academic department.

#### HUB 500

# Cross-Cultural Dynamics of Human Behavior

(Prerequisites: ENG 100/101 and PSY 100) A curriculum-wide elective that studies the psychosocio-cultural aspects of human differences and the enhancement of interpersonal/ intercultural communication skills. Increases the knowledge and understanding of differences in people and perspectives, enhances learning and performance in multicultural environments and fosters interactive diversity as a socio-cultural imperative and behavioral norm.

# HUB 601A

# **Organizational Behavior**

An in-depth study of various types of organizational structures, both formal and informal, with special emphasis on behavior of people within those structures.

#### HUB 601B

# **Communication for Managers**

An analysis of interpersonal communications as related to organizational effectiveness. Covers the practical application of communication theory to work-related situations.

#### HUB 601D

# **Creative Leadership**

A study of the qualities of leadership required today and in the future. Emphasizes historical as well as contemporary leaders.

# HUB 639

#### **Contemporary Issues in Sexuality**

An examination of the personal, interpersonal and social dimensions of human sexuality. Covers topics such as anatomy and physiology of human sexuality, contemporary American sexual behavior, sexual myths, sex-role socialization, sexual dysfunctions and sexual-social issues.

# HUB 641

# Stages of Adult Development

An examination of the adult stages of human biological, psychological and social development. Discusses classical as well as contemporary theories.

# HUB 642

# Theories of Behavior Change

A survey of social psychological theories of behavior change and resistance to change.

#### HUB 646

# Personal and Professional Ethics

A study of normative judgments as applied to contemporary human problems such as the uses of power, business practices and the right to live and to die. Examines varied ethical systems using a case study format.

#### HUB 648

# Personal Growth and Communication

An examination of the meaning and importance of personal growth and human communication in human life and relationships. Development of critical communication skills, self-awareness and selfunderstanding to enhance personal and professional relationships. Presents a variety of models and methodologies in the exploration of physical, mental, emotional, social and spiritual growth.

# HUB 650

# Foundations of Behavioral Research

Behavioral research is a way to examine and understand individual and social behavior through measurement and interpretation. This course investigates the theoretical principles that underlie behavioral research and the application of current research techniques. The course forms the foundation for practical application of behavioral science and continued study in the human behavior and is essential to completing the capstone course in the program (Integrative Project in Human Behavior, HUB 680).

# HUB 660 Assessment in Organizations

(Prerequisite: HUB 650) As study of the organizational assessments of human attributes (abilities, personality and vocational interests) and their role in behavioral determinants in school, work and interpersonal settings. Methodological issues encountered in the assessment of psychological traits (construct validity) and the developmental etiology will be covered. The course reviews the literature in organizational assessment, career development and personnel psychology applied to work. Topics include job analysis, performance appraisal, testing and assessment, employee selection, equal opportunity guidelines, development and evaluation of training programs.

# HUB 680

# Integrative Project in Human Behavior (Capstone Course)

# (Prerequisite: HUB 650)

The course is the capstone project for the MAHB program. Each student conducts a major project that integrates a topic of special interest. The project will analyze and synthesize theoretical and applied concepts from a specialized area selected by the student. Specific course requirements will vary depending upon the instructor, but the student should expect to produce a 20-30 page paper (APA style) that will be evaluated on clarity, thoroughness, style, format and creativity. An oral presentation of the student's work is also expected. Literature reviews and empiricallybased studies are the norm, but other formats are acceptable with the approval of the instructor. The project is conducted for a two-month period and the student may take other courses concurrently if approved by the Committee for the Application of Standards (CAS). The student will normally be required to develop a project proposal during HUB 650 (Foundations of Behavioral Research) or HUB 660 (Organizational Assessment) that can then be completed during the capstone course. This course may not be taken as an independent study.

# HUB 690

#### Guided Study

(1.5-4.5 quarter units)

An individual study under direction of the instructor. Requires prior approval of appropriate academic department. Grading is by H, S, or U only.

# HUM – Humanities

# HUM 490

**Guided Study** (1.5-4.5 quarter units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

### HUM 501

# **Civic Culture and Global Awareness** (*Prerequisites: ENG 100/101*)

Covers the relationship between knowledge and the interdependence of people and focuses on such concepts as citizenship, change and the challenges of migration/immigration patterns, cultural shifts and transnational positioning in our global economy. Also covers the major trends shaping our emerging future and explores the role of citizenship education in perpetuating the value systems that provide the requisite knowledge, skills, attitudes and behaviors for a civil global society. Addresses the needs of the future workplace and marketplace demands and provides a framework for dealing with global citizenship issues and the collaborative enterprise of

# **Course Descriptions**

community-building, economic development, social responsibility and service.

# IBU – International Business

#### IBU 653

# **Global Business and Strategic Planning**

Based on a review of main theories and current trends, this course examines strategic alternatives and choices available to multinational companies in world markets. Emphasis is placed upon applied strategic analysis based on case studies involving multinational companies and settings.

# IEM – Industrial Engineering

# IEM 601

#### **Engineering Economy**

This course introduces economic decision making process for engineering projects and capital expenditure proposals. Concepts of time, value of money, cash flow, and capital rationing is covered. Basic comparative models for evaluation alternatives, sensitivity and probability analysis, depreciation and tax consequences, replacement studies, consideration of intangibles are discussed. Economic analysis under conditions of risk and uncertainty with particular emphasis on econometric models applied to engineering systems is analyzed.

### IEM 602

# Managing Production Planning and Control

This course focuses on the fundamentals of scheduling capacity planning and lot sizing applied to manufacturing and production. Advanced quality assurance and control topics including multivariate quality control methods, machine control, flexible communications networks, forecasting to develop master production schedules, coordinate inventory ordering policies, periodic review, sequencing and scheduling methods of flow and job shops, principles and methods of analyzing and solving production problems are discussed.

# IEM 603

# Managing Facilities Planning Layout

This course examines systematic plant layout methods, analytical and computer-aided approaches for the layout program, location models and analysis, material handling concepts, models, and equipment, warehousing and storage principles and modelsautomation in facilities design, study of facilities location, structure, and planning for efficient layout and material handling systems. Planning and designing facilities, layouts, and material handling system is thoroughly discussed.

# IEM 604

# **Ergonomics and Occupational Safety**

This course provides an overview and introduction to ergonomics; physiology; man and the environment; biomechanics; occupational and industrial psychology; occupational medicine; human attention, vigilance and error; and anthropometry. The techniques to assess mental workload, respiratory protection, and survival in extreme conditions are discussed. In addition, introduction to occupational hygiene and epidemiology is provided. Analysis of work and work station design, manual handling, upper limb and back disorders is done.

# IEM 605

Engineering Applications of Operations Research This course focuses on the application of linear programming and non-linear programming queuing theory, development and application of planning and inventory models, networks, and graph techniques, stochastic processes, waiting lines, simulation, and sequencing and scheduling algorithms to problems encountered in industry and business.

# ILD – Instructional Leadership

#### ILD 603

# Curriculum Alignment and Evaluation for School Administrators

School administrator's perspective of instructional theory, curriculum development and methods for aligning course content to articulated goals and evaluation procedures. Student understanding of course content will be developed through class discussions, curriculum projects, presentations and reflective analysis.

# ILD 625

# Educational Research

An introductory educational research course designed to provide knowledge, skills, and dispositions required for students to understand and demonstrate knowledge of quantitative, qualitative and action research. Emphasis is on the knowledge and skills required of a competent consumer and producer of educational research. The course requires that students utilize a high level of library skills and computer technology to locate relevant research and literature. (Scheduled over a two month period and meets once a week.).

# ILR – Information Literacy

#### ILR 260

# Information Literacy and Report Writing (Prerequisite: ENG 100/101)

A cross-disciplinary course that teaches effective report and research paper writing through the use of key computer technologies. The course includes Internet research, MLA and APA style formats, computer technologies, spreadsheets and the application of multimedia software and graphics for report presentation. ILR 260 offers refinement in the use of the microcomputer for effective report writing and presentation.

# ITM – Information Technology Management

#### **ITM 200**

# Computer Hardware, Software, Maintenance, and Support

This course provides an in-depth look at the hardware components of a personal computer with the focus on proper installation and administration throughout the course. Students learn to identify, install and configure various computer hardware components as well as basic computer and configuration concepts. This course also provides students with an understanding of basic hardware component features of a personal computer; how hardware and software work together; installation, maintenance and support of various hardware components. These components include: various types of processor chips, motherboards, supporting I/O devices, memory modules, floppy drives, hard drives, SCSI drives and mass storage device installation and maintenance considerations, peripherals support, multi-media devices, support, multi-media support, work terminology, concepts and topology designs, troubleshooting and maintenance fundamentals and considerations, purchasing and building considera-tions of a program commuter tions of a personal computer.

# ITM 205

# Office Productivity Software Applications

This course provides a thorough understanding of the Microsoft Office tools through task-oriented project-based applications built around business themes. A solid framework is provided to develop critical thinking, analysis, problem solving, and information and resource management skills through task-oriented and project-based activities.

# ITM 210

# Introduction to Information Technology

This course provides an introduction to Information Technology (IT) infrastructure concepts and applications in an integrated information system environment. This course focuses on understanding the importance of IT for various types of IT applications within an organization. Topics include: overview of hardware, software, data resources, telecommunications and networks. The course provides an overview of "what" IT is and how to apply IT in various organizations.

# ITM 230

# **Computer Network Technologies Overview**

This course emphasizes the network operational concepts and implementation. It provides students with an understanding of network basics and emerging local area network technologies. Topics include: integration of hardware and software components, network architecture, protocols, interconnection of networks using bridges and routers, network links using cable modems and DSL and IEEE 802 network access standards. TCP/IP will also be reviewed within the context of networking protocols.

### ITM 320

#### Information Technology Management (Prerequisite: ITM210)

An integrated perspective on how to manage, plan and integrated perspective on how to manage, plan and integrate information technology resources. Provides an overview of the concepts of managing information technologies and covers the topics of information technologies planning, information forecasting and information processing. Project management concepts and processes are also reviewed and applied to specific information technology initiatives and tasks related to (1) Desktop technology, processing and administration, (2) network information technology, processing and administration and (3) database systems technology, processing and administration.

### ITM 330 Desktop Applications and Information Technology Processing

This course provides the solid framework into the concepts and actual implementation of Window 2000/XP. Topics include understanding of the desk-top processing of information to support organizational decision-making and strategic planning. Introduces the client server architecture and focuses on the desktop role as the client connected to database systems and network systems that are required to meet and support the real-world projects and various IT initiatives. Hands-on labs are included.

# ITM 340

# IT Client Environment Using Windows

This course provides the solid framework into the concepts and actual implementation of Windows XP. Topics include understanding of the desktop processing of information to support organizational decision-making and strategic planning. This course introduces the client server architecture and focuses on the desktop role as the client connected to database systems and network systems that are required to meet and support the real-world projects and various IT initiatives. Hands-on labs are included.

### ITM 345

# IT Server Environment Using Linux

This course provides a solid framework into the concepts, installation, and configuration of server Operating System (OS). Topics include understanding of the desktop environments used in the server environment. This course describes ways of exploring and understanding of the OS. It demonstrates the system administration tasks and how they are used to provide support for multiple users. This course also describes issues related to security and shows how to automate tasks through shell scripting.

# ITM 350 Desktop Applications Support and

Troubleshooting (Prerequisite: ITM 205)

This course provides an overview of the role of desktop support in the Information Technology environment. The emphasis of this course is to provide hands-on learning experience for support of desktop operating system and applications.

# ITM 410

# **Computer Network Technologies Overview**

Emphasizes the network operational concepts and implementation. Provides a basic understanding of network basics and emerging local area network technologies. Includes topics such as integration of hardware and software components, network architecture, protocols, interconnection of networks using bridges and routers, network links using cable modems and DSL and IEEE 802 network access standards. TCP/IP will also be reviewed within the context of networking protocols.

# ITM 420

# Local Area Networks

This course covers the network management principles, practices and technologies for managing networks, systems, applications and services. This course reviews the latest computer network technologies, such as ATM, Gigabit, Ethernet, and Fiber Optic connections. This course builds on LAN basics from ITM 230, including how to implement LAN solutions such as FDDI, Fiber Channel and Gigabit Ethernet and WAN technology such as Switched Multi-Megabit Data Service and Frame Relay. This course also covers integrated high-performance router and switch technologies.

### ITM 430

#### Wide Area Networks (Prerequisite: ITM 420)

This course is an overview of the management tools necessary to understand the WAN hardware and software for client server architecture technology. This course focuses on the installation and management of the WAN and the connectivity to other systems and networks. The emphasis of this course is on hands-on learning: how to install, configure and implement the network.

#### ITM 434

#### Wireless Local Area Network (WLAN) Administration

This course provides the fundamental concepts of wireless network administration. The focus is on 802.11 standard wireless solutions including: fundamentals of 802.11 WLANs; radio frequency fundamentals; antennas; RF math and system operating margin; RF power output regulations; wireless LAN operation; 802.11 analyses and troubleshooting; and site surveying. This course provides the basic preparation for the Certified Wireless Network Administration (CWNA) exam.

# ITM 435

#### Wireless Local Area Network (WLAN) Security (Prerequisite: ITM 434)

This course provides the fundamental concepts of wireless network security. The focus is on 802.11 standard wireless solutions including: learning how to defend against the latest hacking techniques, implement the latest wireless LAN security solutions, and understand the impact of new solutions. This course provides the basic preparation for the Certified Wireless Security Professional (CWSP) exam.

# ITM 440

Database Systems Concepts and Data Modeling An introduction to the concepts of data modeling and relational databases. Covers the methodologies for building a logical model, techniques for organizing and designing relational databases and practical approaches to transform logical models to a stable relational database. Introduces fundamental database and application development concepts and techniques. Given database design and application requirements, students design, construct and test a personal computer database and associated application components.

#### **ITM 450**

#### **Database Processing and Administration** (Prerequisite: ITM 440)

This course will provide students with the knowledge and skills necessary to install configure and administer Database Management Systems. Topics included in this course are conceptual understanding of data storage architecture, creation and management of files, groups, databases, tables, queries, locking options, indexes and data views.

### **ITM 470**

#### Information Security Management

This course covers the managerial aspects of information security on computer networks. Security is becoming of utmost importance. This course prepares the student to manage from start to end all aspects of securing a network. This course is divided into six sections covering various aspects of planning and implementing security policies. It starts with defining what security is, it talks about the security triad, CIA, followed by security management practices. Security models and architectures followed by business continuity planning and disaster recovery are discussed. This course includes laws, investigations, ethics, and operation security.

#### ITM 475

#### Information Security Technologies (Prerequisite: ITM 470)

This course covers the technical aspects of information security for computer systems and networks. This course helps students understand the technologies used to design secure information systems and networks. This course is divided into six sections covering various technologies pertaining to information security. With the understanding of what security is, this course discusses access control mechanisms, methods of attack, and secure protocols. It includes how to secure telecommunications networks and the Internet. Cryptography is discussed to provide privacy and secrecy. It emphasizes physical security followed by application and system development security. This course together with ITM 470 help students prepare for the Certified Information Systems Security Professional (CISSP) exam.

#### **ITM 490A**

# Information Technology Project I

(Prerequisite: 10 of the core ITM courses must be successfully completed)

A capstone project for information technology application. Students work on an original and significant project that integrates concepts, principles and tools that are taught throughout the program. Grading is H, S, or U only.

#### **ITM 490B**

# Information Technology Project II

(Prerequisite: ITM 490A) Two-month course, meets once a week.

A capstone project for information technology appli-cation. Students complete their projects and present their original and significant projects to a panel of academic and business professionals. Grading is H, S, or U only.

# JRN – Journalism

#### JRN 300

#### News Reporting and Writing Across Platforms (Prerequisites: ENG 100/101 and ENG 240)

This class covers the organization of news stories and their preparation for newspaper, online, TV and radio formats and the fundamentals of news journalism, including standards of objectivity, fairness and

accuracy. The course focuses on how journalists report the material they ultimately need for their finished stories and provides students with the opportunity to understand what counts as news and how to write focused news stories on deadline. Students learn to identify the structure and basic ingredients of news and master different types of leads and such style conventions as the inverted pyramid, the nutgraph and other non-fiction storytelling techniques.

# JRN 301 Copy Editing

(Prerequisites: ENG 100/101 and ENG 240)

This course provides an introduction to copyediting and includes the roles and responsibilities of a copy editor on a daily newspaper, which go beyond being able to spot grammatical and spelling errors in copy. Students learn how a copy editor approaches a news story and how to edit that story for clarity, sense and organization, as well as for spelling, grammar and style, and fairness. Students will edit copy and write headlines and cutlines, as well as learn the basics of layout and design.

### JRN 305

# The Art of the Interview

(Prerequisites: ENG 100/101 and ENG 240) This course focuses on numerous aspects of interviewing for print, radio and television journalism and the variety of ways in which professional interviewers go about their work. It also includes an historical perspective of the development of interview techniques for various news media. Students will learn how to select an interview subject, prepare for an interview, conduct the interview and write an article based on their interview.

# JRN 310

#### **Convergent Journalism**

(Prerequisites: ENG 100/101, 240, COM 100 and COM 220)

This course covers the technological and organizational convergence that has changed the operations and workflow of many news organizations and the ways in which news content is communicated across multiple media platforms. Students will acquire familiarity with the demands of each medium, create news stories for print, audio, video, and online media platforms and be able to move content fluidly from one media channel to another.

# JRN 320

### Journalism Ethics

(Prerequisites: ENG 100/101, 240, COM 100 and COM 220) This course will examine how objectivity developed in American journalism and what criticisms exist against it. Students will consider real-life ethical scenarios that have faced newspaper journalists, TV reporters, established website journalists and blog authors. Students will discuss how they would have handled the situations and why. Discussions will also revolve around such issues as: the standard of objectivity and potential alternative systems and the influence of different journalistic formats on ethical choices.

# JRN 321

# Legal Issues in Journalism

(Prerequisites: ENG 100/101, 240, COM 100 and COM 220)

This course focuses on the legal aspects of journalism and the ways professional journalists exercise the rights of the press and free expression guaranteed them by the First Amendment to the U.S. Constitution. The class will provide students with both a theoretical understanding of the legal issues in journalism and practical knowledge of how to apply that understanding in the conduct of their professional work gathering and disseminating information. In addition students learn to manage the responsibilities that such rights entail and to respond to limits on those rights.

# **Course Descriptions**

#### JRN 330 Investigative Reporting

(Prerequisites: JRN 300, JRN 301 and JRN 305) Investigative reporting extends beyond partisan claims and counter- claims to offer verifiable facts that can be found in court documents, state or company reports. Such news stories require collecting enough evidence to allow an editorial judgment to be made about whether what people say is, in fact, true. Students will learn how to select an appropriate investigative topic, narrow the focus of a story from a broad subject to a suitable topic, and to conduct the "shoe-leather reporting" that is needed to discover a story's shape and weight. Students will come up with questions, determine whom they will need to interview, conduct the reporting, and then finish by writing an in-depth piece in several drafts that illuminates the chosen subject.

# JRN 335

#### Beat Reporting

(Prerequisites: JRN 300, JRN 301 and JRN 305) Beat Reporting is an advanced course that focuses on adopting a news beat or coverage area by developing and cultivating sources, researching sources, conducting interviews, reporting objectively and writing tightly using the inverted pyramid as the primary style. The course will explore the traditional news beats including city hall, the police, the courts, the military, the environment, religion, education and health. In addition, students will investigate emerging beats such as personal finance, technology, and entertainment, and beats specific to regions of the country, such as aviation, space, and immigration.

# JRN 340

Feature Writing (Prerequisites: JRN 300, JRN 301 and JRN 305) Feature Writing is an advanced course that focuses on the art of writing features for newspapers, magazines, online publications and other media outlets. The course will teach students how to spot creative ideas for features and how to turn these ideas into stories that others will want to read, hear, or watch.

#### JRN 350

# Youth and the News

(Prerequisites: JRN300 and JRN 310)

This course draws on a wide range of scholarly opinions and research, focusing on why young people are bored by conventional journalism, often find themselves disinterested in much print and broadcast news. The course will not only look at youth as consumers of media but also as producers of it by reviewing the prevalence, effectiveness, history and development of school journalism programs. In addition, the course investigates the adolescent as news reporter and citizen, a potentially active shaper of his or her own development. Additional ques tions include whether shifts in tastes may contribute to the generational decline in readers and viewers.

# JRN 355

# Writing at the Margins

(Prerequisites: JRN 330, JRN 335) This course examines the social welfare beat, covering the segment of American society that relies on the government and private charities for basic survival. This beat is often challenging for reporters because of privacy considerations and fear of social stigma that can make authorities reluctant to allow interviews or access to the places where the poor live. Students focus on intractable social dilemmas such as welfare reform, homelessness, child abuse and neglect, drug dependency, and mental illness. Students plan and orchestrate projects on issues that

#### JRN 360

Freedom of the Press: A Journey Through Cinema This course is a study of how movies portray journalists in popular culture, historically and continu-

they wish to learn more about or delve into the char-

itable agencies that seek to bring assistance and

attention to disenfranchised groups.

ing to the present. Students will view, analyze and discuss the role of journalists in a variety of films that dramatically illustrate the journalist as hero or villain, raise important First Amendment issues and show how corporate pressures impact journalists, the media and the public.

# JRN 430

# Reporting for TV News

(Prerequisites: JRN 300, JRN 310, JRN 320, JRN 321, JRN 335)

This course focuses on what it takes to successfully write and assemble reporter packages for broadcast news programs. The course includes shooting video for the package, deciding which video pieces to use and conducting interviews to get information and effective sound bites for the report. In addition to writing and reporting techniques, students will learn how to perform for TV news, including the manner of dress, speech and other factors that relate to trust, believability, and likeability.

#### JRN 431

Writing the TV News Script

(Prerequisite: JRN 430)

This advanced course in broadcast journalism builds on skills developed in JRN 430 (Reporting for TV News). Students learn to distinguish between writing for print journalism and for broadcast. This course covers writing scripts that distinguish between the short, clear prose for print as opposed to writing for radio with its emphasis on spoken words, or TV, which requires weaving together words and visuals.

# JRN 495

# Capstone Project in Journalism

(Prerequisites: JRN 310, JRN 330, JRN 335, JRN 340 and concentration classes MUL 335 or HRN 430, JRN 431, BRO 330, BRO 340)

In this capstone course, students apply the knowledge and skills gained in other courses by working in a journalistic environment, such as a newspaper, broadcast or web-based newsroom or multimedia facility. Students work with the program lead faculty in advance of the course to identify their area of interest and develop a proposal for either a journalism internship or a project. Students who choose journalism projects work on student-developed "inhouse" projects that may include writing stories for the student newspaper, editing a blog, and composing stories for podcasts, multimedia or broadcast programs. Grading is H, S, or U only.

During an internship, a student will work as an apprentice reporter, copy editor or other news-related role at a qualified news outlet. A qualified news outlet must have a memorandum of understanding with the School of Media and Communication and be approved by the Office of Academic Affairs that defines the organization's needs and the responsibilities of interns. All students assemble a capstone portfolio consisting of their best work from this and previous courses and a reflective essay on the internship or project.

# LAS – Language Arts

# LAS 100

# Spanish I

An introduction to elementary Spanish conversation, reading and writing in a comfortable environment. Gives students insight into the Spanish-speaking world, including the United States.

# LAS 200

# Spanish II

(Prerequisite: LAS 100)

A presentation of intermediate Spanish conversation, reading and writing in a comfortable environment. Gives students insight into the Spanish-speaking world, including the United States.

#### LAS 300 Spanish III

# (Prerequisite: LAS 200)

A presentation of advanced Spanish conversation, reading and writing in a cultural studies context. Gives students information about Spanish-speaking cultures in the Americas, particularly the United States. Topics may include history of local communities, labor and educational issues and issues of identity.

# LAS 310

# Literary Readings in Spanish

(Prerequisite: LIT100, LAS300 or equivalent competency) The primary objective of this course is to introduce students to a variety of prominent 20th century Latin American literary texts in their original language. Students will have an opportunity to engage directly with these literary texts without the mediation of translation. Readings will come from a variety of Spanish-speaking countries and historical movements. Discussions, collaborations, and writing assignments will be in English. (Students enrolled in the BA Comparative Literature may substitute an equivalent upper division literature course in another foreign language for LAS310.)

# LAS 340A

#### Spanish in the Professional Work Place for English Speakers +

An introduction to Spanish grammar structures, vocabulary and information in cultural interaction. Gives English-speaking students an effective tool for communication with Spanish speakers in the work place.

# LAS 341

# Applications of Cross-cultural Communication in the Work Place +

An examination of the basic cultural differences generally encountered in the workplace. Gives students strong experience and clear perspectives on crosscultural communication in the work place. Covers modes of teaching including theatrical representation, lectures, videos, guest speakers and oral presentation.

# LAS 490

Guided Study in Spanish

(1.5-4.5 quarter units) Individual study under direction of instructor. Requires prior approval of appropriate academic department.

# LAW – Law

## LAW 200

#### Introduction to Law and Legal Writing

A lower division introductory course exploring the practical application of Civil Law and the various area of practice. The student will learn rudimentary legal research and be introduced to the form of legal writing referred to as "IRAC."

# LAW 304

# Legal Aspects of Business I

A survey of contracts, sales, agencies, personal property, commercial paper and associated topics. Emphasizes prevention of litigation and liability arising from business operations.

## LAW 305

#### Legal Aspects of Business II

(Prerequisite: LAW 304. A sequential course to LAW 304.)

A survey of business organizations (partnerships, corporations, government regulations), property (real property and leasing, estates, community property), business torts, business crimes and associated topics. Emphasizes prevention of litigation and liability arising from business operations.

#### LAW 310 Litigation

A broad-based overview of the various stages of the civil/criminal litigation process. Covers the complete litigation process starting from the initial filing of the criminal information and/or civil complaint, progressing through the client interview, motion and trial phase. Explores the process of court pleading and discovery, including interrogations, depositions and the voir dire process. Also covers heavy strategies and the role of the law office assistant. Students must demonstrate their legal knowledge and understanding of the material through the drafting of a civil complaint, accompanying forms, summons and depositions.

# LAW 400

# **Current Legal Issues**

This course will review contemporary issues including minority rights, abortion, free speech and criminal justice with a special emphasis on the affect these issues have on the business community

# LAW 402

The Art of Negotiation A workshop course for pre-legal and pre-professional students to develop the verbal and analytical skills needed to be effective negotiators in the practice of law and business. Examines general negotiating principles and uses practical student exercises.

# LAW 405

# **Analytical Reasoning**

The development of analytical reasoning through identification of critical issues in the legal, business and political environments, by analyzing historical and contemporary events, followed by the application of established rules of law, ethical standards and social models in developing oral and written arguments for and against specific positions.

# LAW 408

# Legal Writing Research and Oral Argument

This class is devoted to learning the written and oral skills necessary for presentation of legal issues. Students will prepare and argue an appellate case in moot court format. Each student will prepare an appellate brief for one side of a case dealing with a controversial current legal issue. In team format students will then argue the issue presented before a panel of judges. To prepare for oral argument students will visit and discuss presentations made before the Trial Courts and the California Court of Appeal.

# LAW 410

#### Introduction to Law and Legal Analysis

An introduction to case brief writing and legal problem analysis. The classroom discussions employs the Socratic method used in law school classes.

# LAW 420

# Advocacy

A capstone course that requires students to participate in a mock trial. Students write trial briefs, create pre-trial discovery strategies, give oral arguments and examine witnesses in a simulated civil case.

# LAW 430

# **Constitutional Law**

A survey of the historic development of Constitutional Law in the United States. The student will learn the philosophical foundations of the Constitution and review how the political climate shaped landmark decisions throughout the history of the United States.

# LAW 440

# **Comparative International Law**

A survey of international law in (1) the civil environment including trade agreements and contracts, and alternative dispute resolution and (2) criminal law, including investigation and prosecution of human rights violation and the remedies for such violations.

# LAW 445

# Administrative Law for Business

An advanced survey of administrative law and procedure and manner in which the various state and federal agencies are a part of the integral workings of business operations, including, but not limited to, the areas of environmental operations, employee relations, consumer good regulations, occupational safety.

# LAW 455

#### **Public Contracting**

A survey of public contract law and the differences from commercial contract law; including clear record keeping for audits, overseeing activities of sub-contractors, and the impact for violation and breach of contract.

#### LAW 460

### Law School Portfolio Project

A preparatory course for the undergraduate student who is preparing to apply for admission to law school. The course will involve learning strategies and practice for those preparing to take the Law School Admissions Test. Additionally, students will prepare their dossier and personal statement for law school applications.

#### LAW 470

# **Pre-Law Senior Project**

(Prerequisites: LAW 310, LAW 400, and LAW 408) This course represents a culmination of the skills learned in previous research and writing courses. It consists of the preparation of a research document equivalent in form and content to an appellate brief. In the case of those students who have received an internship, this course will be assigned and the student graded on the writings produced during the internship, whether legal memorandum and/or briefs.

# LED – Organizational Leadership

# LED 400

# Introduction to Leadership

This course provides the student with the opportunity to examine core issues in the practice of leadership. The class will identify differing theories and styles of collaborative, integrative organizational leadership and compare them to authoritarian or management by edit within the organizational context. An emphasis will be placed upon developing a personal, ethical leadership style that is applicable in the daily business of the 21st century. The differences in leadership between traits and behaviors will be addressed. Emphasis will be placed on learning to create a community of leadership throughout the organization as well as an understanding of fundamental leadership concepts.

#### LED 410

# Leading in Diverse Groups and Teams

Diverse groups and teams present special challenges to the leader. This course will examine the application of leadership theory to groups that are diverse in gender, ethnicity, education, and functional expertise. Special emphasis will be placed upon the role of the leader in establishing effective collaboration among the members, and in assuring all members of the group have equal inclusion in the decision making process. Additionally, special attention will be given to the inequitable application of power that occurs in groups and teams.

#### LED 420

# Adaptive Leadership in Change

Change is a constant and continuous in modern organizational environments. This class will provide students with the skills needed to recognize the potential impacts of change on their organizations, and to lead their organizations through the change process effectively. A focus of the class will be to encourage the development of strategies to enhance the buy-in to change among the members of the organization as a tool to improve the transition process. Students will develop skills in assessing organizational culture and learn to create the learning organization of the future.

#### LED 430

# **Conflict and Negotiation for Leaders**

Negotiation is a focal skill for leaders in the organizational structure. Effective conflict resolution, bargaining and negotiation are addressed in this course as methods for improving the organizational effectiveness in the long term. A special focus will be placed upon creation of win-win solutions to real life organizational situations. Conflict will be examined as both a necessary and challenging workplace phenomena.

#### LED 440

# Leadership Overview of Organizational Function

The degree to which function responsibilities of an organization are integrated serves as a major contributor to the overall success of the organization. This course introduces the student to the major areas of responsibility for each of the functional areas of a modern organization. While not designed to make the student an expert in all functional areas, this course helps the student to develop an understanding of the role each function plays in the success of the organization, and teaches strategies for the leader to use to enhance the integration of the functions into the overall mission and vision of the organization. Assessing the relationships between organizational structure and the impact on the culture and norms of the organization will be analyzed.

#### LED 450

# Advanced Group Dynamic Theory

As increasingly more work is done in groups, effective leadership needs a greater understanding of group phenomena. This course will explore advanced topics in understanding groups and team formation, hidden agenda items of team members and strategies to navigate difficult behavior or challenging groups. This course will involve experiential learning of group dynamics, examining phenomena and the impact of leadership.

#### LED 460

# Ethics and Decision Making in Leaders

The ability to make appropriate decisions is learned and develops over the entire life of the leader. Beginning with the fundamentals of definitions of ethical terms, students will apply ethical frameworks to case studies and hypothetical situations. This course examines the many components that influence decision-making by leaders, including cultural relativism, legal responsibilities, prescriptive approaches and universal principles. An emphasis will be placed on considering the potential impact of decisions on the organization and transparency in the decision making process.

## LED 470

#### **Classic Studies of Leadership**

The historical context of classic leadership studies will be examined including emotional intelligence, trait theories, personality studies and the emergence of leadership theory. Students will explore the research on leadership that has impacted the development of leadership studies and the understanding of power, authority and influence. This course will aid in preparing students for LED 480 and LED 490.

#### LED 480 Research for Leaders

This course should be taken toward the completion of the BSOL course work, as it allows the student to develop strategies and resources to assist in identifying and interpreting quality research. The study of leadership involves both qualitative and quantitative research which informs effective leadership in an ever-changing and global business environment. The use and comparative value of commercial websites, mass media, trade press and academic literature in the context of the leadership and business disciplines will be explored. Students will have the opportunity to explore current research, and emerging theories in their area of interest and expertise.

# LED 490

# Leadership Capstone Project

(Prerequisite: Completion of six of the preceding courses) The capstone course is designed to be the culminating work for the Bachelor's degree in Organizational Leadership. Under the guidance of the instructor, students will design a project to demonstrate their mastery of leadership theories, approaches and frameworks. Students will include scholarly research, attention to ethical frameworks, and critical analysis in their project. A professional presentation of 10-15 minutes of the student's project is required. Grading is H, S, or U only.

#### LED 601

Theories, Practices, and Ethics of Leadership In this course, students begin to develop an understanding of the theories, practices, and ethics of leadership. Students identify and assess their own leadership philosophy then analyze the relationship between their leadership philosophy and selected theories of leadership. Students evaluate leadership theories, concepts and approaches. Students integrate ethical decision making processes and assess the potential impact of leadership strategies on organizations.

#### LED 602

Developing and Implementing Groups and Teams The formation and development of groups through effective leadership is the focus of this course. Team communication styles and roles within teams are examined. Strategies that foster creativity in groups are discussed. The impact of technology on teams and communication styles is evaluated. Students learn experientially about groups and teams and the impact of diverse ethical perspectives by participating in group activities and observing leadership in small groups.

# LED 603

# Organizational Leadership

The role of organizations and organizations' leadership in a society characterized by technological integration, geographic decentralization, and instant communication will be discussed. Topics to be covered include leadership theory, acquisition of power and influence, charisma, participative and transformational forms of leading. The course will examine organizations within the private and public sectors, and will draw upon diverse perspectives and ethical considerations.

# LED 604

Change and Adaptation within Organizations This course looks at today's business environment and the pervasiveness of change. Course topics will focus on continuous and discontinuous change, organizational redesign, and the essential skills necessary for leaders to initiate corporate and organizational transformations. Resistance and acceptance of change initiatives, including the impact on organizational culture will be examined. Students will strengthen their leadership skills and strategies in order to initiate and implement change in organizations through problem-solving experiences and forecasting exercises across a broad range of organizational contexts.

# LED 605

Negotiation, Bargaining, and Conflict Resolution This course focuses on the knowledge, skills, and abilities required to design, conduct, and evaluate effective conflict resolution and negotiation practices. Course topics include interpersonal and intragroup conflict resolution; persuasion, problem solving techniques and decision-making in conflict resolution; overcoming bias, anger, and retaliation. Students will assess leadership skills used to navi-

gate a conflict situation and utilize negotiation. Students will begin to detect conflicts as potential clues of organizational challenges.

#### LED 606

# Information Management for Leaders

This course focuses on the strategic role of information technology in today's learning organizations. Emphasis is placed on the application of information technology strategies to strategic planning, client/customer analysis, rapid decision-making, and problem solving. Topics will include the use of information as an organization resource; integration of information into the vision, mission, goals, and assessment of practices of organizations; the use of advanced information technologies to implement change; and analysis of information to achieve competitive advantage. Emphasis will be placed on the technical skills needed in storing, updating, and retrieving information; building and using Webbased applications and business forecasting. Students will participate in a classroom/laboratory environment to facilitate application of theory to real world situations.

# LED 608

# Seminars in Leadership

This course prepares students to conduct in-depth research in their area of interest synthesizing knowledge, and theory of leadership. Students will learn to judge scholarly, peer-reviewed work as unique from wisdom literature found in many popular leadership books. Two research papers will be written in the course with a focus on preparation for the thesis/capstone project. APA format, 5th edition will be required, and students will gain skills in internet searches. In addition, students will give a presentation of approximately ten minutes on one of their research paper topics in professional attire and utilizing the appropriate technology.

# LED 609

#### **Capstone Project Course**

(Prerequisite: MNS 601 and five leadership courses) Working in teams and/or as individuals under the guidance of the instructor, students clarify research topics and identify scholarly sources from which data is gathered in preparation for the project. Students choose from a thesis, applied business research, comparative study or case study. Students then gather data and/or analyze research and present their capstone project in both written and oral form to the client organization, if applicable, and to other students and faculty. The capstone project is the culmination of the student's learning and must be submitted in scholarly format to be completed. Completion of a research statistics course and a minimum of five leadership courses is required as prerequisite to this course. Grading is H, S, or U only. Course is eligible for In Progress (IP) grade.

# LIT – Literature

#### LIT 100

Introduction to Literature

(Prerequisites: ENG 100/101)

An overview of the main genres of literature, including fiction, poetry and drama. Examines literary language and different approaches to literary criticism designed to increase student confidence when responding to literature.

# LIT 300

#### Methodologies in Comparative Literature (Prerequisite: LIT 100)

An introduction to the major issues and methodologies of the field of comparative literature, including problems of translation, issues of trans-nationalism, and post-colonial studies. Rather than focus on specific cultures, languages, or periods, this course is meant to prepare students for future work in comparative literature by providing a framework for the discipline and practice of comparative literature. As such, this course will focus on broad discussions of

the trends and debates of comparative literature while using specific literary texts to illustrate and test those theories.

# LIT 310

#### **Chinese Literature in Translation** (Prerequisites: LIT100)

This course is a survey of prominent modern authors from China in English translation. A selection of poems, short stories, novels, and plays will be considered. Attention will be given to social, intellectual, and political contexts out of which these works have arisen.

# LIT 311

# British Literature I

(Prerequisite: LIT 100) A survey of important British authors and literary trends from Chaucer through the middle of the 18th century.

### LIT 312

# British Literature II

(Prerequisite: LIT 100) A survey of important British authors and literary trends from the late 18th century through the modern era, with a focus on Romantic, Victorian and Modernist writers and texts. Some attention will also be paid to colonial and post-colonial writing in English.

# LIT 315

#### **Contemporary Arabic Literature in Translation** (Prerequisite: LIT 100)

This course is a survey of prominent authors from the Arabic speaking world in English translation. A selection of poems, short stories, novels, and plays will be treated. Attention will be given to social, intellectual, and political context out of which these works have arisen.

# LIT 320

#### **Contemporary Persian Literature in Translation** (Prerequisites: ENG 100/101)

This course is a survey of prominent authors from the Persian language in English translation. A selection of poems, short stories, novels, and plays will be treated. Attention will be given to the social, intellectual, and political context out of which these works have arisen.

# LIT 321

American Literature I (Prerequisite: LIT 100)

A survey of important American authors and literary trends through the late 19th century. Texts will be situated in relation to cultural, philosophical, social and historical contexts, e.g., Puritanism and its legacies, varieties of American Romanticism, debates over slavery and gender roles, formation of national identities.

# LIT 322

#### American Literature II (Prerequisite: LIT 100)

A survey of important American authors and literary trends from the late 19th century through the present. Texts will be situated in relation to cultural, , philosophical, social and historical contexts. Particular attention will be paid to the modernist canon and to works by women and authors of color that respond to American literary heritage and social conditions.

# LIT 337

#### American Literature + (Prerequisite: LIT 100)

An examination of literary heritage of the United States. Includes study of major works and movements in a variety of genres.

# LIT 338

Shakespeare (Prerequisite: LIT 100) An examination of major works of William Shakespeare.

# LIT 342

# World Literature +

(Prerequisite: LIT 100) An introduction to the literary arts of Africa, the

Middle East, Asia, Latin America, the Caribbean and Native North America. Presents a variety of genres, as well as both classical and contemporary works.

# LIT 345

Mythology (Prerequisite: LIT 100)

An examination of mythology. This course recognizes that myth-making is a creative activity central to all cultures, including our own society. Students analyze and compare mythological narratives from a variety of cultures.

# LIT 360

# Literary Theory (Prerequisite: LIT 100)

A survey of major classical and contemporary arguments about the nature of literature, literary expression, and literary experience.

# LIT 361

#### Literature of the Ancient World (Prerequisite: LIT 100)

An examination of literary works of two or more cultures from the beginnings of recorded literature until 100 C.E.. All works will be read in English translation. The literature covered in this course is discussed from two perspectives: (1) the aesthetic and literary approach, which includes universal and essential considerations; and (2) the historical, social and cultural approach, which includes specific information necessary to grasp the meaning of the work. The understanding of a particular work is completed by pairing it with another work from either a different time or place.

# LIT 362

#### Literature of the Middle Period (Prerequisite: LIT 100)

An examination of literary works of two or more cultures from 100 C. E. to 1450 C.E, this course focuses on world literature excluding works written in English, although all works will be read in English translation. The literature covered in this course is discussed from two perspectives: (1) the aesthetic and literary approach, which includes uni-versal and essential considerations; and (2) the historical, social and culture approach, which includes specific information necessary to grasping the mean-ing of the work. The understanding of a particular work is completed by pairing it with another work from either a different time or place.

# LIT 363

#### Literature of the Early Modern World (Prerequisite: LIT 100)

An examination of literary works of two or more cultures from 1450-1650, this course focuses on world literature excluding works written in English, although all works will be read in English translation. The literature covered in this course is discussed from two perspectives: (1) the aesthetic and literary approach, which includes universal and essential considerations; and (2) the historical, social and culture approach, which includes specific information necessary to grasping the meaning of the work. The understanding of a particular work is completed by pairing it with another work from either a different time or place.

# LIT 430

#### Children's Literature and Literacy (Prerequisite: LIT 100)

Provides students with the foundations necessary for teaching children to read and learn through reading. It emphasizes the role of literature in literacy development and learning across the curriculum

from K-8. Students learn to identify the stages in reading development, to select appropriate literary texts for diverse learners at each stage, analyze children's literary texts and assess the developing literacy and language development of young learners.

#### LIT 443

# World of the Short Story

(Prerequisite: LIT 100) A look at short stories. The reading list includes varieties of form and style in short fiction drawn from world literature and focuses on contemporary writing.

#### LIT 446

# Studies in Poetry

(Prerequisite: LIT 100) Focused study of a particular theme, genre, period, or author.

# LIT 450

# Studies in the Novel

(Prerequisite: LIT 100) Focused study of a particular theme, genre, period, or author.

#### LIT 456

# Studies in Drama

(Prerequisite: LIT 100) An examination of the conventions and varieties of dramatic texts and performance, focusing on drama of the 20th century. Includes discussion of both

Western and non-Western traditions.

# LIT 460

Gender and Literature

(Prerequisite: LIT 100)

A study of the representations of gender in literature to better understand changing literary aesthetics. Discusses assumptions about the ways gender permeates language and discourse.

#### LIT 461

#### **18th Century World Literature** (*Prerequisite: LIT 100*)

An examination of literary works of Europe and Asia from 1650–1800 C.E, this course focuses on world literature excluding works written in English, although all works will be read in English translation. The literature covered in this course is discussed from two perspectives: (1) the aesthetic and literary approach, which includes universal and essential considerations; and (2) the historical, social and culture approach, which includes specific information necessary to grasping the meaning of the work. The understanding of a particular work is completed by pairing it with another work from either a different time or place.

#### LIT 462

# 19th Century World Literature

(Prerequisite: LIT 100)

An examination of 19th century literary works of Europe and Asia from 1800-1900 C.E., this course focuses on world literature excluding works written in English, although all works will be read in English translation. The literature covered in this course is discussed from two perspectives: (1) the aesthetic and literary approach, which includes universal and essential considerations; and (2) the historical, social and culture approach, which includes specific information necessary to grasping the meaning of the work. The understanding of a particular work is completed by pairing it with another work from either a different time or place.

#### LIT 463

# 20th Century World Literature

(Prerequisite: LIT 100) This course will cover and compare 20th century representative works from diverse cultures and literary traditions, with an emphasis on non-North American literature. In addition to discussing the intrinsic qualities of particular texts, the course will explore the relationships between literary works and the historical and social contexts from which they arise; the influence of cultural interactions on literary production, especially in post-colonial literature; and the relevance of works of literature to contemporary international issues.

# LIT 480

# Literature of the Americas

(Prerequisite: LIT 100 and LIT 300) The primary objective of this course is to introduce students to a hemispheric perspective to the study of the literatures of the Americas. With globalization and economic integration, population movements, and circulation of popular culture between the American nations occurring at an ever progressing pace, historians and literary scholars increasingly speak of a "hemispheric turn" in cultural studies of the Americas. This course seeks to contribute to students' appreciation of this hemispheric turn by surveying a variety of prominent 20th century U.S. and Latin American literary texts in translation. Students will have an opportunity to engage directly with these literary texts, allowing them to gain recognition of the dialogs between texts and national literatures across national boundaries.

# LIT 498

# **English Capstone Course**

(Prerequisites: completion of 8 upper division LIT courses)

This course is designed as the culmination of the English B. A. program. Students will bring the skills in literary study, analysis, research and writing learned in the program to bear on an original work of literary scholarship. Students will also be given the opportunity to revisit and revise several papers written in previous classes in the major. This course is an eight-week Practicum. Grading is H, S, or U only.

# LIT 499

# **Comparative Literature Capstone Course**

(Prerequisites: completion of all Major coursework) This is the last course taken for the successful completion of the Comparative Literature major. This two-month capstone seminar affords students the opportunity to demonstrate their knowledge of the literature, theories, and methods they have learned in their core courses for the major. Students will develop a portfolio of their work consisting of revised papers from previous course as well as developing new essays that will demonstrate their knowledge of literature, theory, and methods. Grading is H, S, or U only.

# LSS – Lean Six Sigma

#### LSS 601

# Fundamentals of Process Analysis and Optimization

This course provides the fundamentals of the concepts, tools and techniques for analyzing and optimizing engineering, manufacturing, and transactional processes. The course focuses on application of the Six Sigma methodology to improve process and product effectiveness. In addition, it provides technical expertise for selecting processes and products for improvement, defining improvement projects, developing improvement project plans, and implementing continuous measurable improvement projects.

# LSS 602

# **Operational Efficiency and Cost Effectiveness** (*Prerequisites: LSS 601*)

This course focuses on improving the efficiency and cost effectiveness of an enterprise. The course provides and understanding of the relationship between effectiveness and efficiency. The course explores the application of Lean Enterprise to continuous measurable improvement projects. It focuses on the holistic approach to ensure processes are effective and efficient in achieving organizational goals and objectives while providing optimum customer satis-

# **Course Descriptions**

faction. This course also covers the Design for Lean Six Sigma methodology and its application to operational efficiency and cost effectiveness.

## LSS 603

### Fundamentals of Leading and Managing Continuous Measurable Improvement (Prerequisites: LSS 601 and LSS 602)

This course focuses on the fundamentals of leading and managing continuous measurable improvement initiatives in business, industry and government. It covers leadership, continuous measurable improvement project leadership, continuous measurable improvement deployment strategies, and evaluation of continuous measurable improvement projects. This course also covers the fundamentals of continuous measurable improvement risks, benefits, roles and responsibilities, and technical methodologies.

#### LSS 604

# Advanced Topics in Process Analysis

(*Prerequisites:* LSS 601, LSS 602, and LSS 603) This course focuses on advanced continuous measurable improvement strategies. The course covers advanced topics in Design of Experiments including Taguchi Methods, Response Surface Methods, and Design for Lean Six Sigma. In addition it explores a range of issues affecting continuous measurable improvement.

# LSS 605

# Six Sigma Project Practicum

(Prerequisites: LSS 601, LSS 602, LSS 603, and LSS 604) This course is the culmination of the continuous measurable improvement specialization course work. The intent of the Lean Six Sigma project practicum is to demonstrate the application of Lean Six Sigma problem solving tools and methodologies to solve an industry specific problem. In this course the student will complete an improvement project using the knowledge gained in the four prior courses. For example, candidates should be able to demonstrate that their project has or will result in a cost savings, an improvement in processing or delivery time, or a reduction in quality defects. The project will be selected through an evaluation of the organization goals and objectives. It will be planned and executed. A detailed project report will be sub-mitted upon completion of the report. Upon satisfactory completion of the course work and evaluation of the project report the student will also be certified as a National University Lean Six Sigma Black Belt and/or Green Belt, as applicable.

# LUS – Luiseno

# LUS 100

#### Beginning Luiseño I (Co-requisite: LUS 100A)

LUS 100 is designed as an introduction to the Academic Luiseño Language for those with no previous experience. This course will first stress the acquisition of very basic academic vocabulary centering on artistic expression. This basic vocabulary will allow students to describe or give instructions on how to draw a work of art entirely in Luiseño. Instructional emphasis will then focus on correct pronunciation, standardized orthography, syllabification, spelling conventions, and hyphenation of Luiseño words.

## LUS 100A

# **Beginning Luiseño I Laboratory** (1.5 quarter units)

(Co-requisite: LUS 100)

LUS 100A is designed to strengthen the students' ability to comprehend spoken Luiseño, as well as to converse using the basic vocabulary introduced in LUS 100. The vocabulary introduced in LUS 100 will be presented in utterances within the range of comprehensible input for the students. Intense practice with the vocabulary of LUS 100 will be provided. The same grammatical points introduced in LUS 100 will be reinforced in this lab course.

# LUS 101

Beginning Luiseño II

(Prerequisites: LUS 100/100A) (Co-requisite: LUS 101A)

LUS 101 is an introduction to the Academic Luiseño Language, building upon the vocabulary and gram-mar acquired in LUS 100 and LUS 100A. The present tense and command forms of both transitive and intransitive verbs will be explained. Nominal

declension in the nominative and accusative cases will be elucidated. The intricacies of the five Luiseño verbs of location will be discussed and explicated.

# LUS 101A

Beginning Luiseño II Laboratory (1.5 quarter units)

(*Prerequisites: LUS 100/100A*) (Co-requisite: LUS 101)

LUS 101A is designed to strengthen the students' ability to comprehend spoken Luiseño, as well as to converse using the basic vocabulary introduced in LUS 101. This lab course must be taken concurrently with the lecture course LUS 101. The conjugation of the present tense and command forms of both transitive and intransitive verbs will be practiced in order to enhance the students' auditory comprehension, and to enable students to reproduce in spontaneous speech grammatically correct Luiseño phrases. Nominal declension in the nominative and accusative cases will be drilled orally. The intricacies of the five Luiseño verbs of location will be practiced in real life situations in oral exercises.

# LUS 200

Intermediate Luiseño Language I (Prerequisites: LUS 101/101A)

(Co-requisite: LUS 200A)

LUS 200 is designed for students who have already completed LUS 100 and 100A and LUS 101 and 101Å. The preterit, imperfect, and past frequentive tenses of regular and irregular verbs will be explicated. The oblique noun cases will be introduced and fully explained.

# LUS 200A

#### Intermediate Luiseño Language I Laboratory (1.5 quarter units)

(Prerequisites: LUS 101/101A)

(Co-requisite: LUS 200)

LUS 200A is designed to strengthen the students' ability to comprehend spoken Luiseño, as well as to converse using the basic vocabulary introduced in LUS 200. This lab course must be taken concurrently with the lecture course LUS 200. The preterit, imperfect, and past frequentive tenses of regular and irregular verbs will be explicated. Intense practice in auditory comprehension and oral proficiency in the use of the past tenses will be provided. Ample exercises in the use of the oblique noun cases will be given. The oral formation and the auditory recognition of questions will be fully drilled.

# LUS 201

Intermediate Luiseño Language II

(Prerequisites: LUS 200/LUS 200A)

(Co-requisite: LUS 201A)

LUS 201 is designed for students who have already completed LUS 100 and 100A, LUS 101 and 101A, and LUS 200 and 200A. The future tenses will be explained. The remaining oblique noun cases, the instrumental and the concomitant, will be discussed and fully elucidated. Syntactical agreement between head nouns and adjectives will be explicated. The volitional and potential modes of verbs will be intro-duced, along with other modes of expressing volition and potentiality in verbs. Various means of expressing causation in verbs will be explained.

#### LUS 201A

Intermediate Luiseño Language II Laboratory (1.5 quarter units)

(Prerequisites: LUS 200/200A)

(Co-requisite: LUS 201)

LUS 201A is designed to strengthen the students' ability to comprehend spoken Luiseño, as well as to

converse using the basic vocabulary introduced in LUS 201. This lab course must be taken concurrently with the lecture course LUS 201. The future tenses will be practiced intensely in oral and listening comprehension exercises. The remaining oblique noun cases, the instrumental and the concomitant, will be practiced. Practice will be provided to ensure oral proficiency in the use of the instrumental and concomitant. Syntactical agreement between head nouns and adjectives will be practiced. The volition-al and potential modes of verbs will be reviewed in oral and listening comprehension exercises, along with other modes of expressing volition and potentiality verbs. Various means of expressing causation in verbs will be practiced.

# LUS 300

#### Advanced Luiseño Language I (Prerequisites: LUS 201/LUS 201A)

(Co-requisite: LUS 300A) In LUS 300 the present and past tense irrealis and irrealis pronominal clitics will be explained. The formation of the comparative and superlative forms of adjectives will be discussed and explicated using real-life examples from Luiseño texts. The formation of adverbs from adjectives will be elucidated. Reduplication and suffixation of motion morphemes in verbs will be explained. The use of verbal participles, both same subject and switch reference, will be thoroughly studied.

# LUS 300A

#### Advanced Luiseño Language I Laboratory (1.5 quarter units)

(Prerequisites: LUS 201/LUS 201A) (Co-requisite: LUS 300)

In LUS 300A the present and past tense irrealis and irrealis pronominal clitics will practiced to ensure oral and auditory proficiency. This lab course must be taken concurrently with the lecture course LUS 300. The formation of the comparative and superlative forms of adjectives will be practiced in lab exercises. The formation of adverbs from adjectives will be practiced in listening comprehension exercises. Oral and listening comprehension exercises in the reduplication and suffixation of motion morphemes in verbs will be provided. The use of verbal participles, both same subject and switch reference, will be thoroughly practiced.

#### LUS 301

# Advanced Luiseño Language II (Prerequisites: LUS 300/300A)

(Co-requisite: LUS 301A)

LUS 301 is designed for students who have already completed LUS 100 and 100A, LUS 101 and 101A, LUS 200 and 200A, LUS 201 and 201A, and LUS 300 and 300A. Vocabulary and skills are provided to enable students to communicate effectively with children and adults in an elementary school setting. Relative clauses are explained and described in all their complexity. Transitive/intransitive verb pairs are elucidated. The derivation of verbs from nouns, nouns from verbs, and adjectives from nouns and verbs is described. The formulation of abstract and compound nouns is explicated. The expression of 'also' and 'attempt' in Luiseño is explained. Reflexive verbs are introduced and discussed at length.

#### LUS 301A

#### Advanced Luiseño Language II Laboratory (1.5 quarter units)

(Prerequisites: LUS 300 /300A)

(Co-requisite: LUS 301) Ample practice in real-life situations is provided to enable students to communicate effectively in spoken Luiseño. Relative clauses are practiced in order to achieve oral and auditory proficiency. Transitive/intransitive verb pairs and their usage are practiced in extensive exercises. The derivation of verbs from nouns, nouns from verbs, and adjectives from nouns and verbs is practiced in oral and listening comprehension exercises. The formulation of abstract and compound nouns is practice to ensure

speaking and listening proficiency.

# MAT – Teaching

# **MAT 640**

Applications of Research for the Art of Teaching This course is designed to provide classroom educators with the knowledge and skills required to understand, interpret, generate and evaluate research relevant to their lives as professional educa-tors. The work of the classroom educator will be emphasized throughout the course as students produce a major educational writing project. This course will include relevant aspects of professional writing, while remaining focused on the practical needs of the classroom educator who wishes to join the larger professional community in their field of specialty. Must be taken as the last course in the MAT program.

### MAT 640C

Action Research for the Reading Specialization (Prerequisites: Successful completion of MAT 645, MAT

646, MAT 647A, and MAT 647B) This is the fifth course of the Reading Specialization course sequence. It serves as an introductory educational research course designed to provide knowledge, skills, and dispositions required for candidates to understand, interpret, and evaluate research completed in MAT 647B. This course requires that candidates prepare an Action Research Report and utilize a high level of library skills and computer technology to locate relevant research and literature.

# MAT 641 Cultural Democracy: Contemporary, Local and Global Issues

The course content examines the ways in which individuals in institutional roles operate on culturally democratic policies and practices, including how formal and informal political forces influence culturally democratic programs and culturally relevant curriculum development and implementation. The course emphasizes successes in systemic multicultural competency development and examines the observable and hidden evidence of organizational transformation

#### **MAT 642**

#### Program Design: Curriculum Theory, Design and Assessment

This course examines the underlying principles that have shaped outcome based learning; content based standards, accountability and need for education reform. The course will emphasize evaluation of school programs, student assessment and program design using the California Coordinated Compliance Review guidelines.

#### **MAT 643**

#### Models of Teaching, Theories, Applications and Practice

This course explores how a variety of teaching models and learning theories are applied in instructional contexts. Specific application of some models and theories will be discussed in class and presented in student-designed curriculum projects.

# **MAT 644**

# Foundations and Principles of Curriculum

This course surveys the field of curriculum with specific emphasis on foundations, principles and issues for public educators in California's linguistically and culturally diverse society. The course identifies various approaches to curriculum and the development, design, implementation and evaluation of curriculum. Application of curriculum approaches is pro-vided through student-designed analyses of curriculum.

# MAT 645

# **Developing Fluency in Reading**

Provides a research-based analysis of the phonology,

morphology and orthography of English, with attention to teaching students at all grade levels to become proficient readers through recognizing sound-print relationships. Candidates will incorporate current approaches to phonemic awareness, explicit phonics instruction, recognition of high-frequency words and spelling patterns for both English language speakers and English language learners.

#### **MAT 646**

#### **Comprehension Strategies and Procedures**

An investigation of meaning-making at both the local (discourse) and global (general knowledge) levels. Covers research-based models of discourse processing and representation construction. Introduces strategies to promote guided reading, independent reading and study skills in all content areas, using the concepts of connecting background experience and applying self-monitoring strategies.

#### MAT 647A

# Field Based Language Arts Assessment and Instruction I

(Prerequisites: MAT 645, MAT 646) Develops the ability to assess the strengths and needs of students in reading, writing, and oracy through multiple measures. Includes classroombased formal and informal, group and individual assessment. Also emphasizes assessment-based instruction, particularly early intervention strategies using flexible grouping, small groups, and one-onone tutoring.

# MAT 647B

# Field Study: Language Arts Assessment and Instruction II

(Prerequisites: MAT645, MAT646 and MAT647A) This field-experience course is the fourth course of the Reading specialization course sequence. It serves to offer the candidate the opportunity to implement research-based theory, assessment, and instructional strategies with a diverse student population. Candidates must complete a field experience requiring assessment and instruction of students, including non-readers and English Language Learners. Candidates work with English Language Learners and struggling readers at early and inter mediate levels in one-on-one, small group and whole class settings. The field experience component of this course is a supervised application of theoretical concepts in a practical setting.

# **MAT 650**

# Teaching English Language Learners

The course focuses on and applies current theories, research, and strategies in language structure and use, as well as in ESL teaching and learning. Factors such as social, political, cultural, legal, psychological, and pedagogical are addressed within the context of elementary, middle and secondary schools.

#### **MAT 651**

# **Developing and Assessing Educational Leaders**

Description: Participating graduate students will complete a self-assessment and create a leadership development and assessment system, based on the needs of their professional responsibilities. Because of the requirements for self-assessment and the development of a learning plan, this should be the first course in program.

#### MAT 652

# Leadership for Student and System Accountability

Description: Participating graduate students will learn the principles of effective accountability and develop a comprehensive accountability plan appropriate to their professional responsibilities

# MAT 653

Leadership Impact on Morale and Motivation Description: Participating graduate students will investigate prevailing research on morale and motivation and identify an action plan that is related to

their professional responsibilities.

#### MAT 654

#### Advanced Seminar in Issues of Poverty, Race, and Class

Description: Participating graduate students will survey the research regarding demographic influences on student achievement and create plans of action relevant to their professional responsibilities.

# **MAT 655**

# Leadership Impact: Synthesis of Theory and Practice

Description: In this capstone course, participating graduate students will apply their accumulated knowledge to a specific challenge of student achievement and educational equity related to their professional responsibilities. This is an individualize course that will be co-designed by the participating graduate student and a faculty advisor.

#### **MAT 670** The Theory of Research-Based Best Practice Instruction

Covers theories and research on Best Practices in education. Best Practice research on effective schools emphasizes: classroom instructional practices, classroom management, school organization and planning, strategies for linguistically and culturally diverse students to access the core curriculum, instructional leadership, teaching environment, teaching strategies, peer assistance, peer review process and parent and community support.

#### **MAT 671**

#### Applied Best Practice Strategies in Classroom Instruction

Upon completion of this course, participants will possess the knowledge, skills and abilities identified in the California Standards for the Teaching Profession. The emphasis is on developing a repertoire of Best Practice Teaching Strategies that can be applied to classroom instruction and assessment of diverse learners.

# MAT 672

# Integrating Multimedia Interactive Technology in **Best Practice Instruction**

Students in this course will learn how to integrate, differentiate, align and individualize instruction using technology and multimedia technologies.

#### **MAT 673**

# Differentiated Instruction and Target Teaching

Participants in this course learn how to increase student achievement by improving the match between the learner's unique characteristics and various curriculum components; how differentiation involves changes in the depth or breadth of student learning; and how differentiation is enhances through the use of appropriate classroom management, pre-testing, flexible small groups, tiered assignments, target teaching, and the availability of appropriate resources.

# MBL – Medical Billing

#### **MBL 200**

# Medical Terminology

(*Prerequisites: SCI 201, SCI 201A, SCI 202, SCI 202A*) This course provides introductory material serving as the foundation to the medical billing, coding and administration degree. Students are provided with the medical terminology and classification system used in the health care industry. Students will learn the roots, suffixes, prefixes, and definitions of the different systems in the human body.

# MBL 210

#### Medical Insurance I (Prerequisite: MBL200)

Students will study the medical insurance industry and its associated terminology. They will also gain

introductory knowledge to the Medicare, Medi-Cal, and TRICARE programs along with programs available through the private sector. Topics discussed will include the importance of accurate claims and the responsibilities of the billing specialist. Legal and ethical considerations of billing are also covered.

## **MBL 220**

# Medical Insurance II

(Prerequisites: MLB210) Students are introduced to computerized account management through the use of MediSoft, the software most commonly used in medical offices. The course covers the general flow of information in a medical office and the role computers play in the medical office administrative tasks. Content is based on industry practice and addresses electronic claims and a variety of compliance issues.

#### MBL 230

Medical Insurance III

# (Prerequisites: MLB 220)

This course is an introduction to the concepts and techniques of CPT-4 and ICD-9 coding. It will cover the purpose behind coding and how to use the various coding reference materials commonly found in medical offices. This course also introduces HCFA-1500 (Universal Claim Form) and the billing require-ments for commercial insurance, Blue Cross/Blue Shield, TRICARE/CHAMPUS, Medi-Cal and Workers' Compensation. Students will learn which fields are needed for which insurance and various billing requirements for the different programs Students will also learn the various legal and ethical techniques for collecting from insurance companies. Various regulations for collecting will be discussed.

# MCW – Creative Writing

#### **MCW 600**

#### Pedagogy of Creative Writing

This graduate level seminar examines the practical and theoretical models of teaching and learning creative writing with particular attention to the devel-opments of the last twenty years. An introduction to and overview of contemporary theories, practices, texts, professional organizations and web sites will be the primary focus of this course.

#### **MCW 620** Writing Internship

MCW 620 will provide students with an opportunity to gain firsthand experience in teaching, publishing, tutoring, editing, and other writing-related activities. In MCW 620 the student will be actively engaged in projects under the supervision of a qualified supervisor at the site and of an assigned faculty member. The projects will be aimed at fulfilling specific objectives mutually agreed upon by the student, supervisor, and faculty member with special emphasis given to the acquisition and application of professional skills. The student will accumulate a minimum of fifty (50) hours of applied experience in MCW6 620 over a period of from 2 to 6 months. During the period that the internship course is active (two months) the student will maintain regular online meeting hours with peers and the faculty member. The class assignments will promote discus-sion on the specific problems encountered by the student and will give the student an opportunity to report on the activities of the internship and discuss the knowledge, skill, and abilities being acquired within the internship assignment. At the end of the internship the student presents a written report on the experience.

#### **MCW 630**

#### Seminar in Fiction

Students will write and critique each other's original work in this advanced fiction workshop. In a workshop-style format, students will explicate and critique how the elements of fiction - details, action, structure, theme, language, setting, rhythm, narration and style - are utilized in published and stu-

dent-generated works. Through reading and critical analysis, students will further define the genre, examine its many forms, and analyze the trends and patterns in literary fiction.

#### **MCW 630A**

Advanced Workshop in Fiction

(Prerequisite: MCW 630)

In this intensive writing workshop, students will work closely with an established writer to further their development as a creative writer and critical thinker. Students will read classic and contemporary works of fiction in order to more fully understand concepts such as narrative structure, character development, point of view, tone, and theme. Students will submit original manuscripts, critique the manuscripts of peers, and will submit revised work for peer and faculty review. (May not duplicate content of MCW630B)

#### **MCW 630B**

Advanced Workshop in Fiction

(Prerequisite: MCW 630) In this intensive writing workshop, students will work closely with an established writer to further their development as a creative writer and critical thinker. Students will read classic and contemporary works of fiction in order to more fully understand concepts such as narrative structure, character development, point of view, tone, and theme. Students will submit original manuscripts, critique the manuscripts of peers, and will submit revised work for peer and faculty review. (May not duplicate content of MCW 630A)

#### MCW 640A

Advanced Workshop in Poetry (Prerequisite: MCW 645)

This intensive workshop on the practice of poetry includes reading a selection of contemporary poems, doing exercises to generate original poems, critiquing each other's writing in a workshop setting, and creating a portfolio of original poetry. (May not duplicate content of MCW640B)

#### **MCW 640B**

Advanced Workshop in Poetry

(Prereauisite: MCW 645)

This intensive writing workshop on the practice of poetry includes reading a selection of contemporary poems, doing exercises to generate original poems, critiquing each other's writing in a workshop setting, and creating a portfolio of original poetry. (May not duplicate content of MCW640A)

#### **MCW 645**

# Seminar in Poetry

This seminar includes a study of the history and practice of poetry through an understanding of poetry forms. The focus is on defining poetry through close reading of a rich selection of both traditional and contemporary exemplars of the various forms, and on the reading, critical analysis and writing of poetry in workshop-style format.

#### **MCW 650**

# Seminar in Creative Nonfiction

An advanced study of the forms of creative nonfiction, such as memoir, autobiography, nature writing, literary journalism, and the personal essay. Through reading, critical analysis and writing in a workshopstyle format, students will further their understanding of the features of creative nonfiction, will strengthen their own writing in all genres, and will broaden their understanding of literature and various modes of literary writing.

# MCW 650A

#### Advanced Workshop in Literary Nonfiction (Prerequisite: MCW 650)

This intensive writing workshop will explore the artist's quest for truth and address the question: how do we as writers in a post-modern age where memory, image and testimony are all suspect, know what we know? This course includes reading a selection of classic and contemporary literary nonfiction with selections from memoir, personal essay, travel writing, and literary journalism. Students will submit original manuscripts, critique the manuscripts of peers, and will submit revised work for peer and faculty review.

(May not duplicate content of MCW 50B)

#### **MCW 650B**

#### Advanced Workshop in Literary Nonfiction (Prerequisite: MCW 650)

This intensive writing workshop will explore the artist's quest for truth and address the question: how do we as writers in a post-modern age where memory, image and testimony are all suspect, know what we know? This course includes reading a selection of classic and contemporary literary nonfiction with selections from memoir, personal essay, travel writing, and literary journalism. Students will submit original manuscripts, critique the manuscripts of peers, and will submit revised work for peer and faculty review. (May not duplicate content of MCW650A)

# MCW 660

# Thesis I (Practicum)

(Prerequisite: all core, specialized study and elective courses)

Students in MCW 660 are required to work one-onone with a faculty mentor in their particular field (fiction, nonfiction, screenwriting or poetry) to develop their thesis proposal and initial draft (a fulllength, publishable-quality manuscript). Grading is S or U only. Course is eligible for an In Progress (IP) grade.

# **MCW 670**

# Thesis II (Revision)

(Prerequisite: MCW 660)

In this capstone course, each student will submit a body of original work of publishable quality, appropriate i length to the chosen genre, with a preface in which the writer discusses his/her evolution as an artist and the evolution of the work. The student will work with a mentor in the development of this work. Grading is by H, S, or U only. Course is eligible for an In Progress (IP) grade.

# MCW 680A

# Advanced Workshop in Screenwriting (Prerequisite: MDC680)

This intensive writing workshop is designed for students to use professional screenwriting techniques in the creation of their own original screenplay. Building on skills learned in MCW680, students will take one of their own ideas and expand it into a short treatment, a detailed scene outline and, at minimum, 60 pages (one-half) of a full- length screenplay. Course assignments, readings and online discussions of both classic and contemporary films are devised to reinforce students' knowledge of threeact structure and provide them with new ways to best tell the idea of their choice. Peer review of works-in-progress will be used to provide writers a mode of creative support. Instructor feedback will offer new strategies on how to surmount possible stumbling blocks in the creative process. (May not duplicate content of MCW 680B)

#### **MCW 680B**

# Advanced Workshop in Screenwriting

(Prerequisite: MDC680 and MCW 680A) This intensive writing workshop is designed for students to use professional screenwriting techniques in the creation of their own original screenplay. Building on skills learned in MCW 680, students will take one of their own ideas and expand it into a short treatment, a detailed scene outline and, at minimum, 60 pages (one-half) of a full- length screenplay. Course assignments, readings and online discussions of both classic and contemporary films are devised to reinforce students' knowledge of threeact structure and provide them with new ways to best tell the idea of their choice. Peer review of

works-in-progress will be used to provide writers a mode of creative support. Instructor feedback will offer new strategies on how to surmount possible stumbling blocks in the creative process. (May not duplicate content of MCW680A)

# MDC – Digital Cinema

### MDC 650

# Producing Digital Cinema

This course focuses on the process of producing and distributing digital cinema content. The course provides students with hands-on experience developing digital content in the form of a digital short based on a personal narrative with archival images and found footage. Students develop individualized distribution strategies based on independent research into current and emerging exhibition media available to independent digital cinema producers, including technical specifications, digital content management and legal considerations.

### MDC 651

# Digital Cinematography

The history of film and digital cinematography, the comparative technical differences of the two methods, and the aesthetic aspects of cinematic practices. Students examine and evaluate cinematic techniques by watching select films and engaging in critical discourse on topics such as lighting, camera movement, camera angles, continuity, cutting, close-ups, and composition. Students also apply cinematic and lighting techniques in controlled studies of digital and film image capabilities using digital stills, digital video cameras. Projects from this course should be considered for the MFA-DC digital portfolio.

# MDC 652

#### **Digital Video Editing**

Examination of the history, aesthetics and theories of motion picture editing and the technical aspects of digital video editing. Students examine and eval-uate editing techniques by watching select films and engaging in critical discourse on topics such as link-age, montage, rhythm, timing and continuity. Using still photographic images and original digital video footage, students also apply editing techniques using digital video software to constructing short videos. Projects from this course should be considered for the MFA-DC digital portfolio.

### **MDC 653**

# Film Directing Process and Techniques

Focuses on the techniques, theory and practice of directing films. The course covers the director's responsibilities during pre-production for developing the vision and objectives of a project from script to production. Students explore the techniques of script analysis and breakdown and the aesthetic choices necessary for dramatic and visual storytelling in dramatic and documentary films. Projects from this course should be considered for the MFA-DC digital portfolio.

# MDC 670

# **Producing Documentaries**

Focuses on preparing documentary film projects for production and postproduction. The course covers the planning and logistical requirements of preproduction unique to documentary production as well as the aesthetic and stylistic considerations of documentary subjects. Students should take this class at the end of the second month of MDC691 after completing their thesis proposal. It may be taken instead of MCW680A, Advanced Screenwriting.

## **MDC 680**

#### Screenwriting

An introductory screenwriting workshop that provides a foundational study of the theory and practice of writing for feature film. The course is designed to enable students to complete an outline for a full-length feature screenplay and a first draft of a feature script based on their own original ideas.

Through this course students will sharpen critical and analytical skills, develop a critical vocabulary to talk and write perceptively, articulately, and precisely about professional and student-generated screenplays, and to articulate their own aesthetic tastes and artistic goals. As a result of taking this course students should understand the need to take risks in order to explore and develop one's creative potential to discover and develop original work from one's personal vision.

#### **MDC 683**

#### **Directing and Production Management**

(Prerequisite: MDC 651, MDC652 and MDC653) In Directing and Production Management students receive practical experience managing a film project through preproduction, production and postproduc-tion. The course covers the pre-production and production aspects of directing as well as the necessary planning and logistical requirements of production management. Students audition for positions on production teams fulfilling the roles of director, assistant director and production manager. As part of preproduction students prepare documentation and plan for the production during the residency portion of the course at a National University Learning Center. During the residency students work in a collaborative environment using professional equipment to gain relevant production skills necessary to direct a digital motion picture. Documents produced for this course are included as a part of the MFA-DC digital portfolio. Enrollment in this course is concurrent with MDC688 and MDC689 residency courses.

# MDC 688

# **Digital Cinema Production**

(Prerequisite: MDC 651 and MDC653 and concurrent with MDC683)

This intensive, onsite course is a pre-thesis practicum in the art and techniques of digital cinematography held at a National University Learning Center and must be taken concurrently with MDC683. Students work in production teams with digital cameras and lighting equipment in a variety of studio and exterior settings. During this course students apply cinematic techniques such as camera movement, camera angles, continuity, and composition to shoot raw footage and make sound recordings that will be edited in the subsequent MDC689 course. Footage shot during this course is included as a part of the MFA-DC digital portfolio. (An equipment fee applies to this course. For onsite residency details see the program catalog description.)

# **MDC 689**

# Digital Cinema Post-Production

(Prerequisite: MDC 650 and MDC 652) This intensive, onsite pre-thesis practicum in the postproduction process of digital motion pictures held at a National University Learning Center and may be taken concurrently with MDC683. Students construct short motion picture sequences from footage shot in MDC688 by applying editing and post-production techniques in a postproduction lab using digital video and audio editing software. Edited sequences are included as a part of the MFA-DC digital portfolio. (For onsite residency details see the program catalog description.)

# MDC 691

Thesis Production

(Prerequisite: all other MDC core courses) The MFA in Digital Cinema Thesis consists of a short subject digital motion picture, a written component that demonstrate the student's ability to communicate coherently, critically, and creatively and a select-ed professional digital reel/ portfolio. The written components of the thesis include a project proposal, treatment/synopsis, shooting script, budget and production documentation, a critical analysis of the project and research on relevant genre influences, and a personal evaluation of the candidate's portfolio work and evolution as a filmmaker. Initially, MFA candidates work with their thesis

advisor to develop a thesis proposal. Once a proposal is accepted, a grade of IP is assigned. Milestones established in the proposal include a shooting script or documentary shooting treatment, preproduction planning, production and post-production phases. A rough cut of the project must be submitted to the committee on DVD as specified by the thesis advisor for committee comment prior to completion of the project.

Candidates have one-year from the awarding of the IP grade to submit a thesis. The completed thesis consists of the digital motion picture short, written thesis and digital portfolio on DVD in formats specified by the thesis advisor. The thesis committee evaluates the short subject motion picture project, written thesis and digital portfolio to determine whether the student has mastered the requirements for the MFA in Digital Cinema. Grading is H, S, or U only. (For additional information contact the program faculty advisor.)

# MGP – Video Game Production

# **MGP 650**

Video Game Production and Design This course explores the stages of development of a video game from initial concept through design, core development, post production and quality assurance, to final Gold Master Candidate and finally to product release and marketing. The course c ers critical terminology of game production and introduces students to the complexities of the collaborative process between creative and technical team members that goes to making a next-generation video game. Students will also be introduced to the Game Design Document and learn about the typical structure and purpose of a Design Document by reading several commercial samples before starting work on creating their own. (Documents produced in this course are included as part of the MFA-GP digital portfolio and form the basis of further work on a game design and related documentation which the student will produce as part of the final thesis).

#### MGP 651

# Designing for Interactive Media

In this course, students analyze the many factors impacting effective game design. The course explores the nature of play and what elements can make the difference whether a game is fun and playable or not. Students examine different game genres, styles of play, the influence of psychology on game design elements and consider the positive and negative social impact of games. Other topics include: how different hardware platforms and devices influence game designs and how game design theory addresses different design purposes whether to entertain compared to creating one intended to train, educate or simulate. In this course students will solidify the core original game design they will produce for their final project for this program, and learn how to better integrate this design into the game design documentation. (Documents produced in this course are included as part of the MFA-GP digital portfolio and form the basis of further work on a game design and related documenta-tion which the student will produce as part of the final thesis).

# MGP 652

# Writing for Games

During this course students compare the craft of writing for linear media such as film and television with writing for games and related interactive entertainment media. The course will cover traditional narrative strategies and the impact of interactive game theory on developing game scripts. The course also covers the relationship between copyright licensing and story development. Based on an original game design concept students develop and workshop a basic game storyline and draft selected scenes. Students will also use screenwriting software and programs used in the game industry.

# **Course Descriptions**

(Documents produced in this course are included as part of the MFA-GP digital portfolio and form the basis of further work on a game design and related documentation which the student will produce as part of the final thesis).

# MGP 653

#### Art and Sound Design

This course explores the impact of sound and art on the overall production and design of a game and the theoretical issues surrounding potential new advances in both sound and graphic technologies. Art design issues such as characters, environments, and interfaces will be examined as will the use of storyboarding as an aid to narrative flow and game design. The course also covers the role of the Art and Sound Directors and various other art and sound crafts in a game production team sound design, as well as the role of music, sound effects and voice-overs and the use of out-sourcing in game design. This course will include hands on experience with audio editing software as well as an introduction to game art programs, middleware and tools.

### MGP 654

# Game Production Documentation

(Prerequisites: MGP 650 and MGP 651)

This course provides in–depth coverage of the vari-ous elements that form a commercial quality game design document including a technical design section and art book. Topics covered include integrating budgets and schedules into the document as well as accounting for detailed source material for the core elements of the design logic. Students will continue to work on creating their own design document based on their original game design and will start writing the major sections of the design document. (Documents produced in this course are included as part of the MFA-GP digital portfolio and extend the work started in MGP 650 and MGP 651 on an original game design and related documentation which the student will produce as part of the final thesis).

# MGP 670

# Game Scripting and Prototyping

This course covers the practical application of game engines such as Unreal and how they play an integral part of game development. Students learn how to write scripts for the engine, to analyze the issues surrounding the correct play-balancing of a game, to layout game levels on paper and call out all script-able areas for game content and logic. Students also explore how engines can be used for "modding," altering an existing game using the editing features of the core engine, and how a game engine can be used to rapidly prototype a game concept or design. Finally, Students will use the engine to produce a prototype of the original game design. (Documents produced in this course are included as part of the MFA-GP digital portfolio and form the basis of further work on a game design and related documentation which the student will produce as part of the final thesis).

# MGP 671

#### 3D Art, Animation and Motion Capture

This onsite course will introduce students to 3D tools used by the games industry such as Maya 3D Max and Lightwave. Students will gain hands on experience of using at least one of these major 3D art and animation programs and will build basic models and characters, learn the use of a skeleton, rigging and turnarounds. The elements of animating a character will be covered and the issues relating to integrating resulting graphic content into a finished game will be explored. Students will also study motion capture and the importance it has to successful animation in today's video games. (Art and animation assets produced in this course are included as part of the MFA-GP digital portfolio and form the basis of further work on a game design and related documentation which the student will produce as part of the final thesis).

# MGP 680

# Advanced Workshop in Game Design (Prerequisite: MGP651)

This workshop functions as a design sandbox that allows students to workshop original game design concepts that they will produce as part of their thesis. Students will be exposed to commercial case studies on issues successful game designers face in designing, developing and producing games for the industry. In this master-class setting industry veterans will also provide feedback on student projects.

# MGP 683

Game Production Management (Prerequisite: MGP 654)

This course covers of all aspects of managing a game design and development team and the entire production pipeline and infrastructure. Students generate project budgets and schedules using software tools such as Microsoft Project for scheduling and project management and MS Excel for budgeting purposes. Asset Management Systems such as Alien Brain or Sourcesafe will be examined, as will critical role played by backup systems. Additional topics include management challenges encountered in the game industry by its unique mix of creative and technical personnel.

# MGP 688

**Game Testing and Postproduction** (*Prerequisite: MGP 650 or MGP 651*)

This course covers game testing, play testing, bug checking, and general quality assurance. Students learn how to create a testing plan, learn about different bug tracking software, and the stages of game development from Alpha testing to Beta testing and finally to the creation of a Release Candidate of the game. Topics also include the value of testing to game production and an examination of the intimate relationship between testing and iterative game design. Students will gain hands on experience testing commercial Beta or Alpha stage code.

# MGP 689

# The Business of Games

This course deals with all business aspects of the game industry. Issues pertaining to working with publishers and developers will be explored as will pitching games, creating RFPs, the importance of a P&L, and ways game publishers go about evaluating potential new games. The complexities of working with licenses will be explored, as will issues relating to working with the press, marketing of games, and critical issues of market deadlines and how these can impact game production. Contractual issues and the basic financial structure of the games industry will also be covered, as well as an examination of how all these business issues impact both game design and game production.

# MGP 691

Thesis Production

(Prerequisite: all core courses in the program) While enrolled in this course, an MFA-GP candidate plans, develops and produces a thesis project in consultation with a thesis advisor. The thesis consists of an original game prototype, a commercial quality game design document, a critical evaluation of the project design and a digital portfolio of previous work in the program. To be considered for gradua-tion a candidate must submit the completed thesis to a thesis committee within one year of the start of MGP691. The thesis committee is responsible for evaluating the thesis and determining whether the student has met the requirements for the MFA in Video Game Production and Design as specified in the program outcomes. After candidates successfully develop a design proposal, they are issued IP grades until a completed thesis is completed and evaluated by the thesis committee. Grading is H, S, or U only.

# MTE – Master of Education Teaching

# MTE 600

**Demonstrating Effective Teaching and Learning I:** Assessment and Portfolio

#### MTE 601

**Demonstrating Effective Teaching and Learning II:** Assessment and Portfolio

# MGT – Management

#### MGT 400

Ethics in Law, Business, and Management This course is an exploration of values and ethics in American business utilizing debate and written exercises. It also considers ethical issues arising in the global business environment.

# **MGT 409C**

# Principles of Management and Organization

This course is a survey of the theories, techniques, and concepts of management in organizations and the role of the manager in a technologically-oriented society.

# MGT 422

# Team Building, Interpersonal Dynamics, and Empowerment

An overview of the issues of quality applied to human resources management, topics include the delegation of authority and empowerment, work groups, team building, and employee involvement, reward/recognition programs and employee morale, and the importance of written and oral communication skill in the delegation, sharing, and execution of work. Students gain a clearer understanding of the ways the workplace is changing to improve productivity and profitability.

# MGT 430

# Survey of Global Business

(Prerequisites: ECO 203 and ECO 204)

A study of the accelerating internationalization of all business, this course introduces upper-division undergraduate students to all facets of international business within three broad subject areas: (1) the economic framework of international business, (2) the operating frameworks of multinational corporations, and (3) a framework for global strategic management. It uses case studies to illustrate concepts and methods.

# MGT 442

# Strategic Business Management

A study of the application of strategic management principles to the development, organization, financing, and operation of a business enterprise, this course integrates and applies skills and knowledge gained in other business courses, especially those in management, marketing, accounting, and finance. To enroll in MGT 442, students must first complete all "Preparation for the Degree" courses and at least four of the courses listed as upper-division BBA requirements.

#### MGT 451

#### Production and Operations Management I

A survey of the fundamental concepts of production and operations management, the course covers the use of quantitative methods and computer applications for forecasting, resource allocation, decision theory, capacity planning, project management, inventory management, and quality assurance.

# MGT 481

# Foundations of Entrepreneurship

A study of entrepreneurship with particular reference to creating and starting a new venture. Emphasis on historical development of entrepreneurship, risk taking and entrepreneurship, innovation and marketing the plan, financial plan, organizational plan, going public, and legal issues for the entrepreneur.

# MGT 482

# Small Business Management

An in-depth study of small to mid-sized companies with a view to preparing students for leadership roles. Emphasis on building and managing companies from the start-up phase to their growth and efficient operation. Problem solving strategies of managerial, legal and ethical issues and dilemmas particularly relevant to small business.

# MGT 483

E-Business

Creating, integrating and maintaining successful ebusiness through a business plan. Emphasis on origin and growth of e-business, security concerns of ebusiness, entrepreneurial aspects of business-to-business e-commerce, e-tailing and supply chain management. Students are encouraged to develop business plans through their own website.

# MGT 484

# **Family Business Management**

Planning and operation of an established family business for maximization of profit. Emphasis on succession to next generation, evaluating then existing business plans, marketing strategies, conflict resolution, estate planning, legal and financial aspects.

# MGT 490

# Guided Study

This course is individual study under direction of instructor. It requires prior approval of appropriate academic department.

# MGT 601

# Theory, Practice, and Ethics of Management

This course examines management theory and provide opportunities for application of these ideas in real-world situations. This examination focuses on the managerial functions of Assessing, Planning, Organizing, and Controlling. Both traditional and cutting-edge approaches are introduced and applied. Specific attention is paid throughout the course to the ethical implications of managerial action and inaction.

#### MGT 602

# Strategic Decision-Making in Global Business

(A capstone course for MBA and MA in Management students. To enroll in MGT 602, MBA students must first complete at least 27 quarter units of the MBA program requirements, other than MGT 610C and MA in Management students must complete at least 22.5 quarter units of core requirements.)

An in-depth study of general management functions as organizations adapt to the global environment, this course emphasizes environmental characteristics that make strategic management critical to organizational success, including assessment of organizational strengths and weaknesses, identification of opportunities and threats, optimum response to unanticipated events, and strategic analysis in turbulent environments. It also analyzes the socio-cultural, political, economic, ethical, technological, and regulatory environments that have an impact on businesses in multicultural settings. The course places special focus on the impact of NAFTA and GATT upon the strategic management of business enterprises. Explores global business opportunities provided through new technologies for both small firms and large corporations.

# MGT 602S

# La Toma de Decisiones Estratégica en Negocios Globales

(Curso que culmina la parte académica para los estudiantes del MBA. A fin de inscribirse en MGT 602S, los estudiantes deben haber completado al menos 30 unidades cuatrimestrales de los cursos requeridos del MBA, exceptuando el MGT 610C).

Es un estudio a fondo de las funciones gerenciales en la adaptación de las organizaciones al ambiente global. El curso enfatiza las características del entorno que hacen crítica la administración estratégica en el éxito de las organizaciones, incluyendo la evaluación de las fortalezas y debilidades organizacionales, la identificación de oportunidades y amenazas, la optimización de respuesta a eventos no planeados, y el análisis estratégico en entornos turbulentos. Analiza también los entornos socio-culturales, políticos, económicos, éticos, tecnológicos y de regulación que tienen impacto en los negocios de un entorno multicultural. El curso pone especial énfasis en el impacto del Tratado de libre comercio con Norteamérica (TLC) y el GATT (hoy OMC) en la administración estratégica de las empresas. Explora las oportunidades globales de negocio que surgen de las nuevas tecnologías, tanto para pequeñas como para grandes empresas.

#### **MGT 603**

# **Business Operations Management**

This course presents a customer-oriented view of operations within an organization. Guided by the organization's strategic plan, operations deliver the products and services to the customers. This course explores how this delivery is accomplished with efficiency and effectiveness. Components of the course include issues of quality, physical design, and systems management.

#### MGT 604

#### **Business Project Management**

This course provides a foundation of theory and practice for achieving success using a project approach. Students explore a wide-variety of projects, project definition process, group dynamics in project teams, development of work plans, and measurement and evaluation of performance. Additional topics include project accountability, the dynamics of single project and multiple project environments, project management software, and unique people dynamics in projects.

# MGT 605

# **Organizational Management and Leadership**

This course distinguishes the fundamental practices of sound management functions to the understanding of effective leadership. Organizations need both leadership and management understanding to function effectively in creating the learning organization. Students will learn to analyze and create plans for strategic management, and apply leadership concepts and approaches.

#### MGT 606

# Service Management

This course provides a survey of the different types of services provided by organizations. Topics include similarities and differences between production of services and production of products, the wide variety of services produced, proportion of organizations' offerings that are services, and accountability and quality of services.

#### MGT 607

# Performance Management

This course provides an introduction to the connection between individual performance and organizational achievement. Topics include aligning individual objectives with organizational objectives, motivation, performance appraisal, coaching, and rewarding successful performance.

## **MGT 610C**

# **Graduate Business Project**

(Prerequisites: Specific prerequisites for each program are indicated below:

MBA students: completion of 31.5 quarter units in the MBA program MA in Management students: completion of 27

quarter units of core requirement

MS in Corporate and International Finance students: Completion of FIN609A and 36 quarter units of core

# classes)

A project where students work in teams or as individuals under the guidance of an assigned faculty advisor. Students clarify research topics and identify data sources in preparation for the project. Students then gather data and present their research in both written and oral form to faculty and classmates. Grading is H, S, or U only. MGT 610C is two months in length.

## MGT 630 Global Business Environment

An analysis of the global economic, political, and cultural factors affecting international business, this course provides an overview of international trade and investment theory, the pros and cons of protectionism, the global financial environment, and the role of the multinational corporation. It analyzes international sourcing, marketing, and strategic management for global business.

#### MGT 635

#### The Organization Consulting Process

A survey of the history, values, assumptions, methods, and limitations of the organization consulting process, the course discusses both internal and external consulting as well as roles of managers as both consultants and administrators of the consulting process.

### MGT 637

# **Comparative International Management**

This course studies the impact of country-specific cultural, economic and legal factors on the theory and practice of managing multinational corporations. Case studies focusing on North American, Latin American, European and Asian settings are used to illustrate the feasibility of adapting and combining different national management styles in the operations of domestic and multinational corporations.

# MGT 640

# Operation Planning and Implementation

This course presents the connection between the operations management of an organization and its productivity. Issues of 1) supply chain management, 2) production planning, processes, locations, and quality, 3) human resources, and 4) project management are explored from an operations management perspective. The course identifies the impact of the internet and intranets on operations management as well as the operations management issues resulting from the continued growth of e-commerce.

#### MGT 651

# Managing Safety Issues and Regulations

An analysis of current issues manifested by major legislation and the significant health and hygiene regulations faced by health safety managers, the course covers safety program models including workers compensation insurance, fire protection, product liability, and other casualty risks involved in safety and health programs.

# MGT 680

#### **Topics in International Business**

This is a graduate seminar covering new trends and areas of interest in international business with a focus on regional business environments. Examples of topics treated in the course are: doing business in emerging markets; economic integration in Europe and Latin America; emergence of new global firms and industries; offshoring; outsourcing; etc.

# MGT 690

### **Guided Study**

This is individual study under direction of instructor. It requires prior approval of appropriate academic department.

# **Course Descriptions**

# MKT – Marketing

#### MKT 402A

#### Marketing Fundamentals

This course is the introduction to contemporary marketing theory and its application in the marketing implementation process. It places special focus on identifying market opportunity, product development, promotion planning, pricing decisions, and channels of distribution.

#### MKT 420

# **Principles of Consumer Behavior**

(Prerequisite: MKT 402A)

A study of the dynamics of human behavior and how it relates to the purchase decision, the course provides an in-depth view of the many factors that influence the consumer's decision-making process including personality, social groups, culture, values structure, perception, and learning. Course material is related to market strategy development through lecture, case, and field study.

#### MKT 430

# Introduction to Global Marketing

# (Prerequisite: MKT 402A)

An introduction to the fundamentals of trade, finance, and investment in the international context, the course discusses the international monetary framework and foreign exchange in detail. It reviews theory and history of international trade, including exporting and importing, regional economic integration, and international marketing.

# MKT 434

# Introduction to Market Research

(Prerequisite: MKT 402A) A course that gives the student an overview and practical application of contemporary methods for gathering, analyzing, and preparing market research for use in marketing decision making. It focuses on defining organizational information needs and designing appropriate research methods to obtain it. Specific topic areas include qualitative and quantitative research methods, secondary research, internal market intelligence systems, and data analysis.

#### **MKT 440A**

#### Sales Techniques and Methodology (Prerequisite: MKT 402A)

A survey of the essential principles of salesmanship and selling techniques, the course includes the approach to non-manipulative selling and benefit identification. Also covered is how to identify the right market segment, prospect, and plan for personal selling. It introduces direct selling and provides exercises that enhance the direct selling process. **MKT 441** 

# Channel and Value Networks

(Prerequisite: MKT 402A)

A study of all phases of management skills in the field of physical distribution with emphasis on customer service and international distribution strategies, the course covers distribution strategies for products and services. It pays specific attention to direct distribution (from manufacturing to retail), indirect distribution (agents, independent representatives, and VARs), and direct marketing (fulfillment centers).

#### MKT 442A

# Introduction to Public Relations

(*Prerequisite: MKT 402A*) An exploration of the various methods for dealing with three of the most critical audiences for business information: investors, government agencies and the public.

#### MKT 443

#### Introduction to Advertising (Prerequisite: MKT 402A)

A survey of effective advertising techniques in multiple media (virtual, visual, radio, television) and advertising campaign allocation methods.

#### MKT 445 e-Marketing

# (Prerequisite: MKT 402A)

An introduction to the mass, niche, and direct methods of marketing using a virtual platform including database, Internet, and interactive marketing techniques.

# MKT 446

#### **Introduction to Services Marketing** (*Prerequisite: MKT* 402*A*)

This course examines services marketing as distinct and separate from product marketing. Discussions focus on the theory and practice of designing and developing service marketing strategies for segmented populations. Emphasis is placed on positioning various types of services through added value and immediate response using technology to communicate effectively in a global market.

# MKT 447

Marketing for Entrepreneurs

(*Prerequisite: MKT* 402*A*) A discussion of the strategies and ideas for building a business in the global economy for the entrepreneurial business owner taking a hands on approach to managing a company. This course focuses on innovation and creativity, global thinking, service support, and the importance of the internet in developing marketing strategy in both large and small companies.

# MKT 448

# Not-For-Profit Marketing

(Prerequisite: MKT 402A)

A study of the marketing dynamics of Not-For-Profit organizations in which multiple groups, often with conflicting goals and needs, must be simultaneously satisfied for organizational success. A particular emphasis is placed on the identification and attraction of funding sources in the community.

# MKT 480

# Marketing Capstone

(Prerequisite: MKT 402A and completion of 31.5 quarter units of upper-division core requirements) A synthesis of the marketing knowledge gained in the undergraduate program as expressed through a professional research- or internship experiencebased writing project overseen by a faculty member.

# MKT 602

# Marketing Management

An in-depth examination of marketing environments and the impact marketing activities have on organizational operations in competitive, global, multicultural business settings, the course discusses both domestic and international frameworks of the fundamental marketing functions of product, pricing, distribution, and promotion. It explores and analyzes modern marketing problems and solutions from conceptual, legal, and ethical perspectives. It explains marketing information systems and the use of advanced technologies in marketing decision making.

# MKT 620

Consumer Behavior

(Prerequisite: MKT 602) An in-depth study of how psychological, sociological, and cultural variables influence buying behavior

and marketing strategy development. It focuses on identifying the relevant behavioral variables in a given product purchase situation and determining how marketing strategy can be adapted to meet the ways in which consumers perceive, select, and buy. It uses advanced cases and a field study project.

# MKT 631

Global Marketing

(Prerequisite: MKT 602)

A study of strategic planning and organizing for international marketing, researching global markets, marketing consumer products, industrial products, and services in the world market, the course explores the international advertising and promotion effort, personal selling and personnel management, pricing, distribution systems, export trade mechanics and logistics, financial requirements for international marketing, and coordinating and controlling global operations. It also discusses the effect of trade agreements on international business.

# MKT 631S

# Mercadotecnia Global

Es un estudio de la Planeación Estratégica y Organizacional para la Mercadotecnia Internacional, investigando los mercados globales, la mercadotecnia de los productos de consumo, productos industriales y servicios en el mercado mundial. El curso explora la publicidad internacional y los esfuerzos de promoción, ventas y administración de personal, precios, sistemas de distribución, mecanismos y logística de exportación, los requerimientos financieros para la Mercadotecnia Internacional, y la coordinación y control de las operaciones globales. Analiza también los efectos de los tratados comerciales en los negocios internacionales.

# MKT 633

# Sales Management

(Prerequisite: MKT 602)

This course is a survey of all facets of sales management, including estimating sales potential and forecasting sales, manning territories, selecting, training, motivating, supervising and compensating the sales force, and interfacing with other company functions. Also covered are typical sales management problems and potential solutions.

# MKT 634

Market Research

(Prerequisite: MKT 602)

An examination of principles and techniques of market research with emphasis on quantitative applications, this course focuses on defining organizational information needs and designing appropriate research methods to obtain information. It covers qualitative and quantitative research methodologies, secondary research, internal market intelligence systems, and data analysis.

# MKT 635

#### Advertising Management and Marketing Communications

(Prerequisite: MKT 602)

An analysis of marketing communications from business, social, economic, and political perspectives, this course provides an in-depth discussion of advertising and promotion as key tools in marketing new and established products. It examines advertising planning and management, research, creative development, media selection, direct response, and advertising agencies. Emphasis is on new media technologies and the growing use of alternative media in communicating with selected publics.

# MKT 660

**Strategic Operational Marketing** (*Prerequisites: MKT 602, MKT 620, MKT 631,* 

*MKT634*) Students clarify research topics and identify data sources in preparation for the development, implementation and evaluation of a Marketing Plan for a product or service. Students will gather data and present their research in both written and oral form to faculty and classmates.

#### MKT 670

#### Selected Topics in Marketing (Prerequisite: MKT 602)

This course that is developed on request from regional centers to serve specific regional educational and business needs. Potentially it covers topics such as telecommunications, computers, health care services, marketing communications, retail management, and/or industrial marketing.

# MNS – Management Science

# MNS 205

#### Introduction to Quantitative Methods for Business

(Prerequisite: Placement Evaluation) An examination of advanced algebra techniques in the business setting, including linear systems, polynomials, exponential and logarithmic functions, as well as introduction to probability and statistics. The primary quantitative course required for MNS 407. (Students who have taken college algebra (MTH 215) within the last three years are exempt from this course.)

# MNS 407

# Management Science

(Prerequisite: MNS 205)

A survey of the fundamentals of management science. Emphasizes the concepts and mathematical techniques most useful in business and finance.

# MNS 601

## **Statistics for Business**

An examination of the increasing complexity of business problem-solving confronting today's managers, this course covers the role statistics and forecasting play in the business decision-making process, as well as the principles and steps involved in planning and conducting business research. Within the context of this course, students propose to study a situation that exists within an organizational setting and identify a faculty research advisor with knowledge in the focus area.

# MNS 601S

## Estadística para Negocios

Es un examen de la complejidad creciente de los negocios en la resolución de problemas que enfrentan en la actualidad los gerentes y ejecutivos. El curso cubre la importancia que los aspectos estadísticos y presupuestal tienen en el proceso de toma de decisiones en los negocios, así como los principios y pasos a seguir en la planeación e investigación dentro de la organización. Dentro del contexto de este curso, los estudiantes proponen el estudio de una situación existente en una organización, e identifican un asesor académico con conocimiento del tema en cuestión.

# MNS 682

# Data Analysis for Decision Making

In this course, the students are focused on the tools and methods for effective use of data in problem solving and making management decision. It emphasizes data management and proper ways to communicate the findings in an executive manner. This course covers probability, decision analysis, continuous distributions, hypothesis testing, forecasting, and regression. Exercises and examples are drawn from marketing, finance, and operations management. In addition, computer software will be used to demonstrate the use of the concepts and presentation techniques.

# MSM – Multiple Subject Matter

# MSM 301

**Teaching Elementary Physical Education** A content course covering fundamental movements and movement concepts, fitness and movement forms. Also addresses issues of childhood growth and development, motor learning, nutrition, basic principles of movement and strategies of injury prevention.

# MRA – Master Regulatory Affairs

# MRA 600

Introduction to Regulatory Affairs

This course is designed to present an introduction to the regulations and documents necessary for FDA

approval of a new medical device or pharmaceutical product. The student will be introduced to federal regulations (CFR), human subject regulations, clinical trials and evidence based documents, clinical protocols, data management, clinical trial data, investigational review board and submissions of drug and device approval documents. An introduction to clinical and manufacturing process and stan-dard operating procedure documentation will also be included.

# **MRA 601**

**Clinical Documentation** 

This course will focus on the laws and regulations, documentations and process imposed by the Federal government especially the Food and Drug Administration related to pharmaceutical and med-ical device approval and the clinical trials associated with the approval process. Emphasis is placed on designing and implementing appropriate clinical trial protocol documents as well as all forms associated with the clinical trials used for evidence based documentation of the trial(s). Statistical justification will also be introduced for use as to methodology and analysis of the trial.

## MRA 602

# Human Subjects in Clinical Trials

This course is designed to give the student the fundamental knowledge in the protection of human subjects in a clinical trial. The course will emphasize federal, state and local regulations in protecting the health and welfare of human subjects in a clinical trial. Proper documentation, HIPAA regulations, IRBs, international codes of conduct, Declaration of Helsinki, Informed Consent, adverse events CFRs and all other pertinent documents and codes will be covered.

#### **MRA 603**

Medical Device and Pharmaceutical Regulations This course will focus on the laws and regulations, documentations and process imposed by the Federal government especially the Food and Drug Administration related to pharmaceutical and medical device approval. The course will provide students with detailed knowledge and practical application as it applies to appropriate documentation and process of approval for pharmaceutical and medical devices. The students will understand the nomenclature of the regulatory agencies; have a thorough knowledge of the code of Federal Regulations as it applies to medical devices and

#### MRA 604

pharmaceutical products.

**Coordinating and Monitoring Clinical Research** This course is designed to give the student compre-

hensive knowledge in coordinating and monitoring clinical trials and clinical trials research. Emphasis is placed on understanding regulations, good clinical practice, an overview of research, standard operating procedure, data documentation, preparing and working with subjects, monitoring clinical trials and study closure.

# MRA 605

# Analytical Methods for Regulatory Affairs

This course will give the student the fundamental knowledge of statistical concepts and analytical methods as applied to biomedical science and clinical trials. It will emphasize basic concepts of methodology and experimental design, quantitative analysis of data and statistical significance. A case study approach will be used to cover the basic designs of clinical trials with emphasis on appropriate methodologies, endpoint variables, control groups, blinded studies, eligibility criteria and placebo control. The course will cover statistical analysis including probabilities and variables. Students will be required to design and implement a full protocol for a fictitious drug or medical device elucidating the data for approval.

# **MRA 606**

# FDA Regulations and Submissions

This course will give the student the fundamental knowledge of FDA regulations as they apply to medical devices and pharmaceutical products and the documentation needed for such approval. The code of Federal Regulations will be utilized with emphasis on CFR 21, FDA compliance, ICH guidelines for international harmonization and Good Clinical Practice (GCP), investigator study files, FDA audits and Adverse Event reporting.

### MRA 610 A

# **Research Capstone Project in Regulatory Affairs**

A two month course that meets on a once a week basis, this course is designed to have the student develop and implement a research document that integrates all facets of a clinical trial including regulations, documentation, clinical evidence, data management, statistical analysis of the data and other principles taught throughout the entire program. Grading is by S or U only. Course is eligible for an In Progress (IP) grade.

# MRA 610 B

**Regulatory Affairs Internship** This course is designed to give the student a "hands on" real world experience working in a clinical trial environment. The student will acquire fundamental knowledge in evidence based clinical data, statistical analysis and documentation of clinical results. The student will be required to write a critical evaluation of the clinical trial a complete analysis of methodology, clinical forms, FDA regulations and data management. Grading is by S or U only. Course is eligible for an In Progress (IP) grade.

# MTH – Mathematics

# MTH 012A

# Beginning Algebra I

First of a two-course sequence covering methods of simplifying formulas and expressions, solving equations and inequalities, operating with exponents, and translating statements to symbols. Calculator use is highly recommended. Grading is S or U only. (This course is remedial in nature and does not award collegiate credit)

# MTH 012B

Beginning Algebra II Second of a two-course sequence extending skills and logical analysis begun in MTH012A. Course covers rational expressions, linear equations in two variables, algebraic and graphical solutions of systems of equations, scaling and variations, quadratic and rational equations with emphasis on practical applications. Calculator use is highly recommended. Grading is S or U only. (This course is remedial in nature and does not award collegiate credit)

#### MTH 204

# **Mathematics for Business and Science**

(Prerequisite: MTH 012A and MTH 012B) A review of basic mathematics principles for business, probability and statistics, physical, natural, and social sciences for non-mathematics majors. This course provides the necessary skills to be successful in MTH 210, MTH 215, SCI 104 and SCI 104A, SCI 101 and SCI 101A, SCI 102, SOC 100 and SOC 260.

#### MTH 209A Structure and Concepts of Mathematical Fundamentals I

course, not a methods course.

#### (Prerequisites: Placement evaluation) A study of the real number system and its subsystems, ancient and modern numeration systems, problem-solving and simple number theory. Includes teaching materials and discussion of today's professional organizations. This is a content

# MTH 210

#### Introduction to Probability and Statistics (Prerequisites: Placement Evaluation)

An introduction to probability theory. Covers simple probability distributions, conditional probability (Bayes Rule), independence, expected value, binomi-al distributions, the Central Limit Theorem, hypothesis testing, sampling and analysis of variance. Assignments may utilize the MiniTab software, or text-accompanying course-ware STATDISK for DOS PCs. Computers are available at the University's computer lab. Calculator with statistical functions is required.

# MTH 214

# Modeling of the Environment

(Prereauisites: Placement evaluation) A course offering a thorough and useful beginninglevel understanding of mathematical modeling. Examines diverse applications from the physical, biological, business, social and computer sciences. Teaches how to characterize data, select an appropriate model, solve for model parameters and use the model to predict. Discusses limitations, as well as the capabilities, of models as applied to understanding the real world and its inhabitants. Case studies are chosen to demonstrate useful applications. Graphing calculator is required.

# MTH 215

# College Algebra and Trigonometry (Accelerated Course)

(Prerequisite: Placement Evaluation) A continuation course in intermediate algebra. Examines higher degree polynomials, rational functions, trigonometry and matrix algebra needed for more specialized study in mathematics, computer science, engineering and other related fields. Computer usage is encouraged. This course satisfies computer science prerequisites. Graphing calculator is required.

#### MTH 216A

# College Algebra and Trigonometry I

(Prerequisite: Placement Evaluation)

The first month of a comprehensive two-month treatment of algebra and trigonometry preliminary to more specialized study in mathematics, computer science, business, or other scientific fields requiring advanced mathematics. The course is a continuation of intermediate algebra and covers higher degree polynomials, rational functions transformations and the algebra of functions, matrix algebra and basic arithmetic of complex numbers. Graphing calculator is required.

#### MTH 216B

# College Algebra and Trigonometry II

(Prerequisite: Placement Evaluation)

The second month of a comprehensive two-month treatment of algebra and trigonometry; this course is a continuation of MTH 216A. Topics include trigonometric functions, analytic trigonometry and application, parametric equations, matrix algebra, sequences and series; and applied problems. Graphing calculator is required.

# MTH 220

# Calculus I

(Cross listed and equivalent to CSC208) (Prerequisite: MTH 215, or placement evaluation) An introduction to limits and continuity. Examines differentiation and integration concepts with applications to related rates, curve sketching, engineering optimization problems and business applications. The fundamental theorem of calculus is presented with related techniques for numerical approximation. Looks at the ideas and contributions of Newton, Leibniz, Lagrange, Maria Agnesi and Riemann. Graphing calculator is required. Students may not receive credit for both MTH220 and CSC208.

#### MTH 221 Calculus II

# (Prerequisite: MTH 220)

A discussion of differentiation and integration concepts of the natural logarithm, exponential and inverse trigonometric functions and applications to volumes of revolution, work and arc length. Covers improper integrals and highlights ideas and contri-butions of Natpier, Huygens and Pascal. Graphing calculator is required.

# MTH 222

Calculus III (Prerequisite: MTH 221)

A study of functions of several variables; extrema and Lagrange Multipliers as they apply to today's optimization-problems in engineering, business and ecology; Vector algebra and space geometry; and Kepler's Laws with application to satellite orbital velocity problems and the rendezvous phenomenon. Also examines integrated integrals and applications, the Jacobian transformation. Highlights contributions by Mary Fairfax Somerville, Sonya Kovalevsky, d'Alembert, Laplace and Caroline Herschel. Graphing calculator is required.

#### MTH 223 Calculus IV

(Prerequisite: MTH 222)

A study of sequences, Taylor Polynomials, infinite series, tests for convergence and the power series. An overview of ordinary differential equations; the initial-value problem; exactness and integrating factors; and Bernoulli and higher-order equations with forcing functions. Also looks at undetermined coefficients and variation of parameter methodologies; the basis for solution space and applications to mechanical and electrical engineering. Provides an introduc-tion to numerical solutions by Euler, Milne and Runge-Kutta. Highlights ideas and contributions of L'Hopital, Fourier, Srinivasa Ramanujan, Wronski and Sophie Germain. Graphing calculator is required.

# MTH 301

# Structure and Concepts of Mathematical Fundamentals II

(Prerequisite: MTH 209A)

This continuation of MTH 209A includes concepts of measurement, geometry, probability and statistics, elementary synthetic and Euclidean Geometry. Computer programming in BASIC is introduced. Methods are incorporated whenever possible. However, both MTH 209A and MTH 301 are content/concept courses as prescribed by State regulations, not methods courses. Calculator may be required.

# MTH 304

# **Mathematics Practicum and Portfolio Project**

(Prerequisites: MTH 215 or MTH 216 A and B or Placement Evaluation)

\*Should be taken as early as possible in the student's program

This course provides an opportunity for students to observe and reflect on the actual work of public middle and secondary school mathematics teachers. Students observe at least 28 hours in public middle or secondary school mathematics classrooms and at least 3.5 hours of Mathematics-related student activities and administrative meetings. Early field experiences are coordinated with faculty and representa-tives from school districts. All experiences the prospective teacher will have are documented. It also familiarizes students with the requirements of the Assessment Portfolio which they submit as part of the Single Subject Matter Preparation program. The Assessment Portfolio is a separate requirement and is turned in six months prior to graduation. Students in MTH 304 complete a variety of required activities, a Practicum Packet and a journal based on their observations.

# MTH 311

# **Topics from Geometry**

(Prerequisites: MTH 215 or placement evaluation) Survey of main concepts of Euclidean geometry with the emphasis on the axiomatic approach, constructions, logic of proof and some ideas from non-Euclidean geometry including historical aspects. A study of axioms of Euclidean Geometry, inference rule, some basic theorems of Euclidean geometry and rigorous proofs. Examines congruence and similarity of triangles, Pythagorean Theorem, the circle, construction of straight edge and compass and geometrical loci problems.

# MTH 317 Mathematical Modeling

(Prerequisites: MTH 215 or MTH 216A/B and MTH 210)

A first course in mathematical modeling utilizing a variety of interesting, useful and diverse applications from the physical, biological, business, social and computer sciences. Discusses the limitations, as well as the capabilities, of mathematics as applied to understanding our world and its inhabitants Teaches problem identification, models of solutions, model implementation, modification and maintenance using a case-study approach. Chooses case studies that are interesting, useful applications. Graphing calculator is required.

# MTH 325

# **Discrete Structures and Logic Design**

(Cross listed and equivalent to CSC331) (Prerequisites: MTH 215 or MTH 216A/B or placement evaluation)

Discrete mathematics forms the theoretical foundation for much of today's advanced technology in computer systems communications, digital signal processing, neural networks, control systems and information theory. This course studies combinatorics and graph theory. Also analyzes algorithms, logic, circuits, number bases and proofs. Ample applications (graphs, counting problems, Turing machines, codes) examine the ideas of Euler, Boole, Floyd, Warshall, Dijkstra, Church and Turing, Shannon and Bernoulli. Graphing calculator is required. Students may not receive credit for both MTH325 and CSC331.

# MTH 410

#### **Computer Technology in the Mathematics** Classroom

(Prerequisite: MTH 215 or MTH 216A/B or MTH 301) An overview of the use of computer-based technology in mathematics educational environments. Evaluates graphing calculators and computer software such as LOGO, Geometric Supposer, Rocky's Boots, LOTUS, function plotters, MU Math, Calculus Pad and DERIVE to determine their value in illuminating concepts in the curriculum. Students compare generic or textbook software versus the process of writing programs. Discusses the impact of fast computations and graphics on the choice of topics in the mathematics curriculum. Addresses equity issues related to usage of computers and labs. Requires access to the National University computer lab.

# MTH 411

Number Theory (Prerequisite: MTH 215 or MTH 216A/B or MTH 301 or placement evaluation)

An examination of fundamental concepts of numbers, including divisibility, congruencies, the distribution of primes, Pythagorean triples, the Euclidean Algorithm, the Fundamental Theorem of Arithmetic, Diophantine equations, Goldbach's conjecture and other unsolved problems of number theory. Emphasizes active student involvement in posing and testing conjectures, formulating counter examples, logical arguments and proofs.

# MTH 412

History of Mathematics (Prerequisites: MTH 215, MTH 216A/B, or MTH 301)

An examination of the history of mathematics. Throughout history, mathematics has changed the way people view the world. This course examines currents in the development of mathematics throughout ancient Egypt, Babylon, China and the Middle East. It studies math's influence on society through the major events of Europe, contemporary developments and some projections into the future, including the women and men who played key roles in evolution. Readings and problems are taken from original as well as secondary sources.

# MTH 416

# Algebraic Structures (Prerequisite: MTH 325 and MTH 435)

A look at groups, rings and fields, as well as applications of these systems. Discusses equivalence relations, Lagrange's Theorem, homomorphisms, isomorphisms, Cayley's Theorem and quaternions. Also examines error correcting codes and issues of cryptography. Graphing calculator may be required.

# MTH 417

# Foundations of Geometry

(Prerequisites: MTH 215 or MTH 216A/B and MTH 311)

A discussion of fundamental ideas and processes common to Euclidean and non-Euclidean Geometries, including projective, affine and metric geometry. Examines the interplay between inductive and deductive reasoning and formal and informal proof. Addresses uses in areas such as science (transformations, scaling), art (Escher-type tessellations, projections), architecture (three-dimensional figures) and computer science (fractals, computer-aided design).

# MTH 418

# **Statistical Analysis**

(Prerequisites: MTH 210 and MTH 220) An examination of statistical applications to business, computer science, psychology, education, social sciences and mathematics. Covers fundamental concepts of probability distributions, mathematical models relating independent and dependent random variables, hypothesis testing and experimental design. Study includes fundamental analysis of variance, various distributions and methods of regression, analysis and scaling. Popular software such as SPSS or Minitab may illustrate examples and concrete problems. Graphing calculator is required.

# MTH 432

# Advanced Calculus

(Prerequisite: MTH 223)

A look at sets, functions and the real numbers as an ordered set. Topics include the Completeness axiom, cardinality and Cantor's Theorem; sequences, subsequences, monitonicity and boundedness; the Bolzano-Weierstrass Theorem, LimSup and LimInf; topology of R1 and R2; open sets and limit points. Also discusses compactness and the Heine-Borel Theorem; the properties of continuous functions, uniform continuity, the mean-value Theorem, inverse functions and differentiability; the Riemann integral and the Lebesgue Measure.

# MTH 433

# **Differential Equations**

(Prerequisite: MTH 223 and MTH 435) An analysis of the existence and uniqueness of solutions of ordinary differential equations with initial conditions. Examines linear systems of ordinary differential equations and the geometry of solutions of homogeneous linear ordinary differential equations. Discusses applications to electro-mechanical systems and the design of control systems. Graphing calculator is required.

# MTH 435

#### Linear Algebra

(Prerequisites: MTH 325 and MTH 220) An examination of systems of linear equations and matrices, elementary vector-space concepts and geo-

metric interpretations. Discusses finite dimensional vector spaces, linear functions and their matrix representations, determinants, similarity of matrices, inner product, rant, eigenvalues and eigenvectors, canonical form and Gram-Schmidt. Computer software demonstrates computational techniques with larger matrices. Graphing calculator or appropriate software may be required.

#### MTH 438

# Applied Mathematical Modeling

(Prerequisites: MTH 433, MTH 416, and MTH 432) A capstone course for the B.S. in Mathematics, this course culminates the mathematics major studies and should be taken at or near the end of the program. Addresses important problem areas such as political science, ecology, psychology, sociology, eco-nomics, anthropology, business and institutional planning using mathematical techniques from areas such as calculus, geometry, probability and statistics, linear and matrix algebra and linear programming. Discusses principles and methods of constructing, analyzing, interpreting, evaluating and refining models. Compares mathematical models, including analytic and simulation, discrete and continuous and deterministic and stochastic. Graphing calculator is required.

#### MTH 440

**Numerical Analysis** 

(Prerequisite: MTH 220)

An introduction to numerical computation employed so widely in industry and research. Discusses errors in numerical computation, truncation and discretization and machine storage restrictions. Examines function approximation, roots of nonlinear equations, systems of linear equations, algebraic eigenvalue problems, polynomial interpolation and cubic spline interpolations, quadratures, numerical differentiation, initial and boundary-value problems. May utilize programmed algorithms. Graphing calculator is required.

#### MTH 441

# Abstract Algebra with Applications

(Prerequisite: MTH 416)

This course continues and advances the work done in MTH 416 Algebraic Structures, discussing selected fundamental algebraic structures and their applications to computations. The main concepts of Sylow Theory of finite groups, Galois Theory, Lattices Theory, Coding Theory and Cryptography, Boolean Algebra and Switching Theory are developed. Finite permutation groups (Cayley's Theorem) and their applications in science and arts are studied.

#### MTH 442

# Functions of Complex Variables and its Applications

(Prerequisite: MTH 223)

This course is a study of functions of complex variables and their applications to other mathematics branches, sciences, and engineering. The following topics will be examined: the complex plane, analytic functions, integration and Cauchy's Theorem, sequences and series, residue calculus, Fourier and Laplace transforms, and applications.

# MTH 450A

# **Mathematics Project Course I**

(Prerequisites: Completion of Mathematics Core for B.S. in Mathematics and interview with Department Chair) The project courses are not independent study. They are directed student team projects or internships in mathematics. Requires utilization of previously acquired skills and knowledge to complete the project. Students can select project topics from industry, government, business, education, or research. Grading is S or U only.

#### MTH 460

**Problem Solving Strategies** (Prerequisites: MTH 416 and MTH 417)

Students will learn about the science and art of problem solving. The course will develop student's abilities to solve mathematics problems. The aim in the course is not to impart any specific body of knowledge, but rather to foster the students' under-standing that mathematics is a science of identifying, solving problems and generalizing. the course helps prospective mathematics teachers to acquire their professional skills in the teaching of mathematics in secondary school to teach and assess problem solving. The survey of most famous math problems will be given. Most popular problems from the secondary school mathematics course will be considered. The course includes the description of main approaches to solving standard and challenge math problems. Students will learn strategies most widely used: pattern recognition, working backwards, guess and test, experimentation or simulation, reduction expansion, organized listing and exhaustive listing, logical deduction, mathematics induction, divide and conquer, writing equations, producing fruitful sketches.

# MTH 461

#### Methods of Teaching Mathematics

(Prerequisites MTH 311, MTH 325, MTH 412, MTH 460)

Designed as a critical inquiry into present-day tendencies in teaching mathematics in order to help prospective mathematics teachers to acquire their professional skills in the teaching of mathematics in secondary school. Fundamental concepts of mathematics teaching, main teaching strategies, methods and forms of organization of students learning, survey of concepts of basic mathematics, algebra, geometry, trigonometry, functions, discrete mathematics, probability, statistics, beginning calculus will be studied. Effective approaches to the teaching of main mathematics will be discussed. Graphics calculators, computer mathematics learning and tutorial software, different kinds of manipulation and their used in classroom also will be considered.

#### MTH 490 Guided Study

(1.5-4.5 quarter units)

Individual study under direction of a faculty member. Requires prior approval of appropriate academic department and school dean. Requests should be made well in advance.

# MUL – Multimedia

#### **MUL 200**

**Communication Tools** 

(Prerequisites: ENG 100/101 and COM 100/COM 200) An overview of digital communication tools and techniques used in today's workplace, as well as an introduction to message design and the social and ethical responsibilities within the digital communication field. Through intensive practice, students learn how to write for various business, education and entertainment purposes, such as analytical, descriptive, procedural, summative and technical. They learn foundations of web design, web animation, copy editing and formatting techniques in conjunction with traditional and online research skills. Software instruction includes Macromedia Studio MS Word, PowerPoint, Internet browsers, compression utilities, and FTP programs.

# **MUL 205**

# **Principles of Graphic Design**

(Prerequisites: ENG 100/101 and COM 100/COM 200) A hands-on introduction to the principles and techniques of graphic design for print and digital media that covers print vs. digital production, resolution and size considerations, vector vs. raster formats, color theory and layout principles, typography, file formats, output, and management. Software instruction is in Adobe Photoshop.

# **Course Descriptions**

# MUL 245

# Principles of Web Design

(Prerequisites: ENG 100/101 and COM 100/COM 200) Introduces the terminology, history and evolution of web design and the use of hypertext. Provides an overview of effective web page design and efficient site architecture. Covers content development, navigation, and usability. Software instruction is in Dreamweaver.

# MUL 255

### Interactive Design

(Prerequisites: ENG 100/101 and COM 100/COM 200) Provides a hands-on introduction to the basics of web presentation. Students apply aesthetic and usability criteria to produce web presentations, movies, and other animated components for place-ment into websites. Covers technological constraints of web presentation and animation, appropriate uses of motion in a web page, gaming element, game design, and digital asset management for optimal delivery of animated content. Software instruction is in Macromedia Flash.

#### MUL 265

# Digital Audio and Video

(Prerequisites: ENG 100/101 and COM 100/COM 200) This course provides an introduction to the basic application skills and concepts of non-linear editing. Students learn the basic properties of audio, video and still assets, and practice importing, logging, and basic insert assembly editing. They also develop a sensitivity to the unique aesthetic and usability criteria of digital video in application environments. Software instruction is in Adobe Premiere, Sonic Foundry Sound Forge and Acid Pro.

#### MUL 275

# 3-D Modeling and Rendering

(Prerequisites: ENG 100/101 and COM 100/COM 200) Provides a hands-on introduction to the basics of 3-D graphics in still and animated formats. Students produce basic 3D elements and apply aesthetic and usability criteria to their placement in digital and print media applications. Covers technological constraints of 3D applications; appropriate uses of still and motion 3D elements to enhance message delivery; and the management of digital assets for optimal delivery of media. Software instruction is in 3-D Studio Max

# **MUL 300**

### **Convergence Media**

(Prerequisites: MUL 200 level requirements or equivalents)

An integration of digital communication tools and techniques used in today's workplace. Through intensive project practice, students learn how to create multimedia products for various business, education, and entertainment purposes. Software instruction includes Macromedia and Adobe authoring tools, and creative applications.

#### MUL 305

# Applied Graphic Design

(Prerequisites: MUL 200 level requirements or equivalent)

Hands-on application of principles and techniques of graphic design for print and digital media. Covers advanced concepts in digital production; resolution and size considerations; vector vs. raster formats; color theory and layout principles, typography, file formats, output, and management. Software instruction is in Adobe Photoshop.

# MUL 310

Introduction to Video Gaming (Prerequisites: ENG 100/101; COM 100 or COM 200) An overview of video gaming and its applications: the current soft- and hardware tools used to build and deliver video games; the history and evolution of the field; and its social and ethical implications. Students learn the fundamentals of how a video game is created from its inception to release and

become familiar with the roles of programmers, designers, artists, and writers in developing the product. Includes an overview of the basics of mathematics and physics used in video game development, as well as the computer languages appropriate for the various game genres: action, role-playing, adventure, simulation, etc.

#### MUL 315

#### Video Game Design

(Prerequisites: MUL 200 level requirements or equivalents)

An in-depth review of video game development, with emphasis on game design theory and practice. Students learn fundamental principles and strategies of game design to transform a story or game vision into a virtual environment prototype that integrates player activity, interface, and graphics. They become familiar with basic algorithms that control interactivity and representation, and learn about the various tools available to designers, such as prototyping software and game engines. Software instruction is in Anark and Genesis3D.

#### MUL 318

Video Game Production

(Prerequisite: All general core courses) A survey course in the fundamental principles and strategies of video game production. Students assume the role of producer, as they learn game assembly, project management and tracking. The course introduces the challenges posed by the everchanging technologies used to make and deliver video games, and students become familiar with the many different game engines available to developers. Software instruction is in Anark, Genesis3D, MS Project, and Concurrent Version System/Revision Control System (CVS/RCS).

#### MUL 318A

#### Video Game Production Lab

(Prerequisite: MUL 315)

This laboratory course provides students with an opportunity to use tools and methods of video game production. While not intended to be an extensive and comprehensive course on the game production process, the lab introduces the student to the basic tools while providing hands-on experience on how they are used to produce the final product. This will include teaching the student the fundamental parts of a video game engine and providing examples of how the professional community makes modifications to these engines to achieve specific objectives. The student will also use tracking software during game production. Software instruction is in Anark, Genesis3D, MS Project, and Concurrent Version System/Revision Control System (CVS/RCS).

#### MUL 325

#### **Psychology of Video Games**

(Prerequisite: All general core courses and PSY 100) An overview of the psychological aspects of game playing, with particular emphasis on video gaming. The course presents the historical foundations of research into human play activity, as well as current research into video gaming and its impact on individuals and society. Students learn about the interaction between people and video games in terms of individual sensory response, personality, and social behavior. Covers human-computer interaction issues specific to video gaming, such as cognitive processing, reaction time, idiosyncratic navigation, and nontraditional interface design. Topics include motivation, addiction, fantasy escapism, conflict, aggression, reward, player prestige, and alienation.

#### MUL 332

#### Electronic Design and Layout

(Prerequisites: ENG 100/101 and COM 100) An introduction to layout design for print and Web publishing that covers typography, layout theory, prepress production methods and project management. Emphasizes practical development techniques to produce digital visual images efficiently. Software instruction is in Adobe Illustrator.

### MUL 335

Digital Design for Print (Prerequisites: ENG 100/101 and COM 100/COM 200) This course covers the stages of publishing in print media from the inception of a project through to the distribution of a finished product. It provides students with the opportunity to put their theoretical and classroom knowledge to practical use in the design, creation and printing of a project. Topics include: typography, layout theory, pre-press production and project management. Students learn through intensive practice layout techniques for digital and print delivery. Software instruction is in

### MUL 336

QuarkXPress and InDesign.

2-D Graphic Imaging (Prerequisites: MUL 200, MUL 205, MUL245, MUL255, MUL 265, MUL 275)

An intermediate course in computer-aided photographic manipulation and the merging of vector and raster graphic files used in web authoring and print design. Students produce images in a variety of digital formats, applying aesthetic and composition design principles. Covers technological limitations of Internet graphics. Software instruction is in Adobe Photoshop and Illustrator.

#### MUL 345 Applied Web Design

(Prerequisites: MUL 200 level requirements or equivalents)

This course provides hands-on application of principles and techniques of web design for digital media. Provides an in-depth study of effective web page design and efficient site architecture. Covers projects in content development, navigation, and usability. Software instruction is in Dream weaver.

#### MUL 355

#### Game Scripting

(Prerequisites: MUL 200 level requirements or equivalents)

Provides hands-on in-depth application of web programming, game scripting, and web presentation. Students apply aesthetic and usability criteria to produce web presentations, "movies" and other animated components for placement into student projects. Covers applied technological constraints of web presentation and animation, game design, game scripting, appropriate uses of motion in a web page, and digital asset management for optimal delivery of animated content. Software instruction is in Macromedia Flash.

#### MUL 365

#### Applied Digital Audio and Video

(Prerequisite: MUL 265 or equivalent) In this course, students develop hands-on experience in advanced nonlinear editing. Students assess the aesthetic impact of editing decisions and demonstrate proficiency with timing, continuity, music cuing, transitions, and the use of text elements. They also become familiar with the pivotal role of sound, including the art of layering sound, voice and music elements to foster a rich multimedia experience. Software instruction is in Adobe Premiere, Sonic Foundry Sound Forge and Acid Pro.

#### MUL 370

#### **Digital Interactivity**

(Prerequisites: MUL 200, MUL 205, MUL 245, MUL 255, MUL 265, MUL 275)

Provides a hands-on introduction to the basics of Web interactivity and its potential for e-business, entertainment and education. Students apply aesthetic and usability criteria to visual, textual and aural components integrated into interactive presentations, games and instructional media. Covers technological constraints of Web delivery, interactive design and composition and media integration techniques. Software instruction is in Macromedia Director.

#### MUL 375 Applied 3-D Modeling and Rendering

(Prerequisites: MUL 200 level requirements or equivalents)

Provides a hands-on application of 3-D graphics in still and animated formats. Students produce basic 3D elements and apply aesthetic and usability criteria to their projects in digital, animated sequence, video, and print media applications. Students compare technological constraints of 3D applications, appropriate uses of still and motion 3D elements to enhance message delivery, and the management of digital assets for optimal delivery of media. Software instruction is in 3-D Studio Max.

#### MUL 381

#### Video Game Art

(Prerequisites: all general core courses)

A hands-on course to learn video game art and its design for entertainment, military, and education; the course presents the current software tools used to build and deliver video game art. Students learn the fundamentals of how video game art is created from its inception to incorporation into a video game; they learn the role of artists in the video game development team; and also the current tools used to create game art.

#### MUL 385 Video Gamo

#### Video Game Animation (Prerequisites: all general core courses)

(r) requisites in general concentration of the basics of 3-D and character animation for video game development. Students produce basic 3D environments and animation, as well as animated characters for use in video games and simulations. They apply aesthetic and usability criteria specific to video games. The course covers technological constraints of 3D and character animation; appropriate uses of animated 3D characters and elements to enhance game message delivery and interactivity; and the management of digital assets for optimal delivery of media. Software instruction is in 3-D Studio Max.

#### MUL 401

#### Advanced Video Game Design

(Prerequisites: all general core courses) Students learn advanced video game design techniques. They become familiar with advanced techniques for game production management, game asset management, and advanced prototyping tools. The advanced design documents and prototype developed in this class will be used to further produce and / or further modify a video game in the follow-on course, MUL 411 (Video Game Production Project).

#### MUL 410

#### Authoring Corporate Training I (Prerequisites: ENG 100/101 and COM 100)

(Prerequisites: ENG 100/101 and COM 100) Provides an introduction to instructional design for corporate training through e-learning and multimedia. Students evaluate digital training packages according to instructional design theory and learn multimedia authoring skills to apply to instructional modules they produce. Covers learning theories, authoring tools, multimedia development and usability criteria applied to instructional media. Software instruction is in Macromedia Authorware.

#### MUL 411

#### Video Game Production Project

(Prerequisites: all general core courses; MUL 325; MUL 318, MUL401)

Students apply advanced theory and practice to create a professional video game design and production product. They develop the game concept they evolved in prior classes into a commercial quality set of game production documents together with a high quality prototype or game engine modification suitable for a commercial pitch of a game to a client.

#### MUL 420 Multimedia Arts Portfolio Project

(Prerequisites: all general core courses; completed concentration courses)

In this two-month capstone course, students assemble a portfolio of their best work from previous Multimedia Arts courses and edit and/or improve those pieces. Suitable to show a prospective employ-er, the portfolio will include digital presentations graphics, websites and animations-and printed samples, as well as multimedia documentation, such as creative briefs, proposals, flow charts, executive summaries and descriptive critiques. Grading is S or U only.

#### MUL 430

Advanced 2-D Imaging

(Prerequisite: all general core courses)

An advanced course in computer-aided graphic manipulations as used in Web authoring. Students produce images in Web-standard formats, applying aesthetic and composition design principles. Covers strategies to overcome technological limitations of intent graphics; software add-ons and extensions to aid graphic design; and digital design project management theory and practice to produce graphics efficiently. Software instruction is in Adobe Photoshop and Illustrator.

#### MUL 431

#### Advanced Page Layout/Production

(Prerequisites: all general core courses; MUL 336; MUL 430)

A hands-on course on advanced techniques of web graphics production. The course presents the current software tools and techniques for the creation and production of web graphics intended to create identity, atmosphere, and navigation on websites. Students will be exposed to advanced techniques of web graphics, including working with layers, slicing, hotspots, rollovers, using graphics as framing devices on websites and the use of graphics for content. Students will use current industry software to master the skills of print production, including Photoshop, ImageReady and Dreamweaver.

#### MUL 432

#### Print / Web Production

(Prerequisites: all general core courses; MUL 336; MUL 430; MUL 431)

This is a hands-on course on print production. The course presents the current software tools and techniques for print production of a wide variety of projects and materials. Students will be exposed to the concepts and techniques of print production, including digital pre-press, color management, and the steps required to prepare printed pieces for final output. Students will use current industry software to master the skills of print production, including learning the Adobe Acrobat PDF workflow for digital pre-press and the latest digital production tools.

#### **MUL 440**

Multimedia Design for the Web

(Prerequisite: all general core courses) Intermediate Web page authoring and site design. Students compile graphics, animation and text to produce sites that demonstrate e-business, entertainment and distance education uses of the Internet. Students apply aesthetic and usability criteria to websites developed according to industry practice. Software instruction is in Macromedia Dreamweaver. Certified Internet Webmaster (CIW) curriculum included.

#### **MUL 445**

#### Management of Web Projects

(Prerequisites: MUL 200 level requirements or equivalents)

Advanced course in managing the development of Web-based products. Students use project management tools as they produce websites for e-business, entertainment and distance education. Covers product life cycle planning, risk analysis and client-oriented rapid development. Software instruction is in

MS Project, Excel and Word.

#### MUL 450 Advanced Web Presentation

(Prerequisites: all general core courses; MUL 440) Provides hands-on training in advanced Web presentation techniques. Students learn media integration techniques for quick-loading websites that use streaming vector animation and sound. Covers conceptual 14 approaches to building interactivity into Web presentations; advanced usability testing for user satisfaction; and digital asset management theory and practice. Software instruction is in Macromedia Flash.

#### MUL 460

#### Advanced Digital Audio and Video (Prerequisite: MUL 365)

Advanced digital audio and video production techniques. Students write scripts, create storyboards and program a/v clips for business, entertainment and educational purposes. Covers advanced Web casting techniques and strategies to overcome technological limitations of Web video and sound. Software instruction is in Sonic Foundry Sound Forge, Adobe Premiere and Terran Media Cleaner.

#### MUL 461

#### **Motion Graphics**

(Prerequisite: all general core courses) A hands-on course on motion graphics for broadcast, video, and film; the course presents the current software tools used to build and deliver motion graphics. Students will apply concepts and techniques of compositing layers of computer-generated imagery and live action video, special effects, camera movements and cinematic points of view, as well as the design of titling and motion imagery. The course surveys works of professional animators, directors, and producers to demonstrate industrystandard techniques.

#### MUL 462

#### **Digital Audio Creation**

(Prerequisite: all general core courses) An advanced course in computer-aided digital audio creation used in CD, DVD, video, and Web authoring. Students learn basic music theory and composition practices applied to digital audio production, utilizing professional software tools used in the field, as well as hardware applications such as MIDI controllers. Covers file management and compression for specific delivery mediums. Software instruction is in Adobe Audition, Acid Pro, and Pro Tools.

#### MUL 463

### **Digital Video Production Project** (Prerequisite: all general core courses; MUL 460; MUL 461; MUL 462)

Students apply advanced theory and practice to create a professional video production. They develop a concept into a script and manage all phases of production, such as field lighting, videography, sound recording, editing, and producing to DVD and tape. Software instruction is Premiere Pro, Acid Pro, Pro Tools, and Audition.

#### MUL 470 Interactive Multimedia

(Prerequisite: all general core courses) Provides hands-on training in the production of interactive products for e-business, entertainment and education. Students conduct needs assessments for a variety of potential interactive presentations, games and instructional media and apply project management skills to a product they produce. Covers strategies to overcome the technological constraints of Web and CD-ROM delivery; interactive design theory and practice; needs assessment procedures; and methods of project management. Software instruction is in Macromedia Studio and MS Project.

## **Course Descriptions**

#### MUL 471 Advanced Digital Interactivity Project

(Prerequisite: all general core courses) Provides advanced training in the production of interactive products using computer-based authoring tools for e-business, entertainment, and education. Students conduct extensive reviews of interactive presentations, games, and instructional media and apply lessons learned to programming interactive models in real-time virtual environments. Covers advanced techniques to overcome the technological constraints of web and CD-ROM delivery; interactive design theory and practice; and methods of project management. Software instruction in Macromedia Studio and MS Project.

#### MUL 480

#### **Character Animation**

(Prerequisites: all general core courses) Provides a hands-on introduction to the basics of 3-D animation. Students produce basic 3-D animation and apply aesthetic and usability criteria for appropriate and effective use. Covers technological constraints of 3-D animation; appropriate uses of animated 3-D elements to enhance message delivery; and the management of digital assets for optimal delivery of media. Software instruction is in 3-D Studio Max.

#### MUL 481

#### Advanced Animation Project

(Prerequisites: all general core courses; MUL 381; MUL 385, MUL481)

A hands-on course to learn video game art and its design for entertainment, military, and education; the course presents the current software tools used to build and deliver video game art. Students learn the fundamentals of how video game art is created from its inception to incorporation into a video game; they learn the role of artists in the video game development team; and also the current tools used to create game art projects.

#### MUL 490

### **Guided Study**

(Prerequisite: Faculty Determined) (1.5 – 4.5 quarter units)

Courses require individual study under direction of instructor. Furthermore, course requires proper approval of appropriate academic department.

**MUL 495** Internship

#### MUS – Music **MUS 100**

#### Fundamentals of Music

An examination of the basic structure of Western music, musical styles, form, different periods and their chief representatives and the dynamics of musical expression and appreciation. Introduces students to elements of music theory common to many cultures.

#### MUS 100A

#### Fundamentals of Music: Creation and Performance

(Prerequisite: MUS 100)

A hands-on laboratory course. Students devote workshop time to creation and performance of music.

#### MUS 326

#### Survey of American Music History

A survey of the evolution of American music from the Colonial period to the present. Emphasizes political, social and economic developments as related to the evolution of American music. Styles of music may include colonial hymns and psalters, American Indian music, African slave music, minstrel/sentimental songs, spirituals, folk/country music, brass bands, ragtime, jazz, blues and contemporary music.

#### MUS 327 World Musi

World Music +

(Prerequisites: ENG 100/101) An exploration of musical traditions and techniques in a variety of cultures, including Japan, India, Native America, South America, and Africa. Broadens students' cultural understanding of music.

#### NBC – National Board Certified

#### NBC 639

Applications of Research for the Art of Teaching Capstone Project: Accomplished Professional Teacher-Leader Portfolio

This course is designed to provide classroom educators with the knowledge and skills required to understand, interpret, generate and evaluate research relevant to their roles as professional educators. The National Board for Professional Teaching Standards provides a platform, a structure and the tools to examine all aspects of their work in relationship to research and development in the field. The NBPTS provides a national, voluntary system of certifying teachers who meet and exceed high and rigorous standards for the profession that define what accomplished teachers should know and be able to do. This course requires that teachers develop a professional portfolio that incorporates knowledge, understanding, application, interpretation, generation and evaluation of research which will be translated into providing evidence of having met the challenging NBPTS certificate standards as evidenced by performance-based assessments.

#### NBC 680

#### Measuring and Informing Quality Teaching and Learning: Research, Standards, Portfolios and Assessments

This course will provide students with an overview that leads to clear interpretations and understanding of the various components and interconnections that shape and influence the quality of teaching, student learning, professional development and leadership in our schools and communities. Students will examine the history of significant issues, policies, and topics related to quality teaching and they will have an opportunity to analyze the goals, consequences and impact of resulting reforms, innovations and benchmarks for performance excellence. Students will consider approaches, strategies, practices and programs that yield successful outcomes for diverse learners. The course will emphasize the understanding and use of the Core Propositions, the Certificate Standards, and the Assessment Process set forth by the National Board for Professional Teaching Standards as a tool and resource for learning about, examining, and enhancing the quality of teaching and learning, professional development and leadership skills that require knowledge of adult learning and that leads to desired student outcomes. Fundamental knowledge will be gained in preparation to be successful candidates in the National Board Certified Teacher Process.

#### NBC 681

#### Membership in Learning Communities: Professional Contributions, Colleagueship, Partnerships, and Continuous Growth

This course will guide students in the review of research and articles that focus on the definitions, features and significance of learning communities in schools, classrooms, and associations. Upon review, students will apply the knowledge and understandings in relationship to the NBCT Core Propositions and Certificate Standards that are aligned with accomplished practices reflecting their own membership in learning communities and in their work with dult learners. We will also explore and determine how commitment to democratic learning can be demonstrated through work with diverse students in the classroom, with families, the community and colleagues. We will consider the effects of democratic and supportive environments for learning, and how to advance students and our own decisionmaking and advocacy skills. Finally, we will identify and document specific examples of accomplishments as defined in the NBCT Portfolio Entry #4 related to professional development activities, interactions with colleagues and families and professional contributions outside of the classroom that have had the greatest influence and impact on student learning and educational excellence.

#### NBC 682

#### Evidence of Student Learning: Entries and Documentation Based on Videotapes

This course will provide students with extended time and opportunities to explore and comment on accomplished teaching practices related to the NBCT standards in their fields of expertise. Students will focus on developing responses to the two entries that require video taped segments that capture their abilities to engage and interact with students effectively as they meet identified instructional goals and objectives, and second, to capture students engaged and interacting with each other in well planned lessons supported by effective instructional strategies that require demonstrations of learning. Students will review and explore research related to a variety of "best practices" that result in student engagement, brain compatibility and content-specific approaches that making curriculum accessible to all student populations. Teachers will videotape segments of their teaching that mirror each of the two Entry requirements outlined in their certificate area, and in a collaborative mode, feedback will be provided specific to attainment of the standards and achievement of clear, consistent and convincing evidence of achieving student learning outcomes.

#### NBC 683

#### Evidence of Student Learning: Entries and Documentation Based on Student Work Samples and Knowledge of Subject Matter

This course will provide students with opportunities to review research and commentary that guide and shape decisions and judgments we make when determining the levels of progress students are making toward achieving academic goals, and to identify elements of our practice that contribute to successful learning outcomes. One essential source of evidence about a teacher's practice is student work and in this course we will look at what students are asked to do, how the teacher interprets the responses, what the teacher does with the information, and what might occur next as a result. Students will analyze, describe and reflect upon their instructional practices, lesson designs and assessment strategies related to the requirements that are outlined in the NBCT Portfolio Entries that rely on student work samples as evidence of accomplished practice. Teachers will examine individual and class work as a source for drawing conclusions about their instruction, use of assessments, interpretation of data and next steps that ensure increased achievement. In addition, an overview of the NBCT Assessment Center exercises will be provided and teachers will engage in subject matter examination based on standards and alignment with child development and learning theory. Students will explore and provide written responses to on-demand prompts as outlined in the NBCT tutorial and as generated by colleagues.

#### NSG – Nursing

#### NSG 200

#### Foundations of Nursing Practice

(Prerequisite: C or better in NSG 211T and "S" in NSG 211A))

Utilizing the nursing process framework, this course focuses on meeting basic human needs through planning and implementing nursing care to effectively contribute to achievement of health goals of the patient. This course covers beginning knowledge and skills required for nursing care of patients with commonly occurring health problems. Basic concepts of therapeutic communication are discussed. Concurrent enrollment in NSG 200A is required unless approved by the Department Chair.

#### NSG 200A

#### Foundations of Nursing Practice Clinical Laboratory

(Prerequisite: C or better in NSG 211T and "S" in NSG 211A)

Using the language of nursing, students will devise basic plans of care for patients. Practical application of beginning knowledge and skills required for nursing care of patients with commonly occurring health problems is demonstrated in both laboratory and clinical settings. Through simulation and patient interaction, use of therapeutic skills of communication will be analyzed. Concurrent enrollment in NSG 200 is required unless approved by the Department Chair. Clinical Laboratory is graded on a Satisfactory / Unsatisfactory basis based on successful completion of the course requirements.

#### NSG 205

#### Nursing Process I: Medical-Surgical Nursing I

(Prerequisites: C or better in NSG 200 and "S" in NSG 200A)

The course focuses on concepts relating to care of the adult in the acute care setting with commonly occurring medical-surgical problems. Emphasis of this course is on the use of the nursing process and in developing competence in providing nursing care for individuals with specific health care needs/problems. In addition, the student is provided with an orientation to coordination of patient care. Concurrent enrollment in NSG 205A is required unless approved by the Department Chair.

#### NSG 205A

#### Nursing Process I: Medical-Surgical Nursing I Clinical Laboratory

(Prerequisites: C or better in NSG 200 and "S" in NSG 200A)

Practical application of knowledge and skills required for nursing care of adult patients with commonly occurring medical-surgical problems is demonstrated in both laboratory and clinical settings. Using the language of nursing, students will devise and implement care plans and teaching plans. Concurrent enrollment in NSG 205 is required unless approved by the Department Chair. Clinical Laboratory is graded on a

Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

#### NSG 211T

#### Health Assessment

(3.0 quarter units)

(Prerequisites: Admission to nursing program and completion of required general education preparation with a minimum GPA 2.75).

This course covers holistic health assessment as the basis for nursing intervention and practice, interviewing skills, health history, physical examination, cultural variations and laboratory and diagnostic procedures throughout the lifespan of clients. Concurrent enrollment in NSG 211A is required unless approved by the Department Chair. This course is 30 contact hours.

#### NSG 211A

## **Health Assessment Clinical Laboratory** (1.5 quarter units)

This course covers practical application of holistic health assessment as the basis for nursing intervention and practice, interviewing skills, health history, physical examination, cultural variations and laboratory and diagnostic procedures throughout the lifespan of clients. Concurrent enrollment in NSG 211T is required unless approved by the Department Chair. Grading is by S or U, based on successful completion of the course requirements. This course is 45 contact hours over a one month period.

#### NSG 300 Making the Transition to the Role of the Professional Nurse

This course provides an exploration of the role of the professional nurse for the independent duty corpsman (IDC). It compares the role of the professional nurse with other health care roles. There is focus on nursing assessment, nursing diagnosis, nursing intervention, and evaluation. The course includes a required clinical practicum.

#### NSG 301

#### Practicing the Role of the Professional Nurse

This course provides an overview of the practicing role of the professional nurse. There is focus on assuming responsibility for the nursing care of complex clients in an acute care setting. The course includes a required clinical practicum.

#### NSG 310

#### **Professional Nursing Values**

This course provides an introduction to fundamental values as a foundation for professional nursing practice. It provides an understanding of key components necessary for demonstration of professional value-based behaviors. The concept of caring will be examined through the values of altruism, autonomy, human dignity, integrity and social justice.

#### NSG 314

#### **Nursing Process II: Childbearing Family Nursing** (Prerequisites: "C" or better in NSG 205 and "S" in

NSG 205A) Continuing the study of life processes, this course focuses on the health care needs of parents and newborns during the childbearing experience. Introducing the concept of the family as a unit, emphasis is placed on the variations in health care due to behavioral, life cycle, physiological, cultural, and environmental factors. Concurrent enrollment in NSG 314A is required unless approved by the Department Chair.

#### NSG 314A

#### Nursing Process II: Childbearing Family Nursing Clinical Laboratory

(Prerequisites: "C" or better in NSG 205 and "S" in NSG 205A)

This course covers practical application of knowledge and skills required for nursing care of families in the childbearing period. Using the language of nursing, students will care for the family as a unit, considering behavioral, life cycle, physiological, cultural and environmental factors. Concurrent enrollment in NSG 314 is required unless approved by the Department Chair. Clinical Laboratory is graded on a Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

#### NSG 315

#### **Nursing Process III: Pediatric Nursing**

(Prerequisites: "C" or better in NSG 314 and "S" in NSG 314A)

Continuing examination of the family as a unit, this course focuses on the health care needs of families with children. Emphasis is placed on the variations in health care due to behavioral, life cycle, genetic, cultural, and environmental factors. Concurrent enrollment in NSG 315A is required unless approved by the Department Chair.

#### NSG 315A Nursing Process III: Pediatric Nursing Clinical Laboratory

(Prerequisites: "C" or better in NSG 314 and "S" in NSG 314A)

This course covers practical application of knowledge and skills required in nursing care for families with children. Using the language of nursing, students will care for the family with children as a unit, considering behavioral, life cycle, genetic, cultural and environmental factors. Concurrent enrollment in NSG 315 is required unless approved by the Department Chair. Clinical Laboratory is graded on a Satisfactory / Unsatisfactory basis based on successful completion of the course requirements.

#### NSG 320

**Nursing Process IV: Medical-Surgical Nursing II** (Prerequisites: "C" or better in NSG 315 and "S" in NSG 315A or see specific degree)

This course focuses on concepts relating to care of the adult in the acute care setting with medical-surgical problems. In addition, urgent and critical nursing care responses to symptomatology are addressed. Emphasis is on refining use of the nursing process to provide nursing care for individuals with specific health care needs/problems. Concurrent enrollment in NSG 320A is required unless approved by the Department Chair.

#### NSG 320A

#### Nursing Process IV: Medical-Surgical Nursing II Clinical Laboratory

(Prerequisites: "C" or better in NSG 315 and "S" in NSG 315A or see specific degree) Practical application of knowledge and skills required for nursing care of adult patients with commonly occurring acute/critical medical-surgical problems is demonstrated in both laboratory and clinical settings. Concurrent enrollment in NSG 320 is required unless approved by the Department Chair. Clinical Laboratory is graded on a Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

#### NSG 322

#### **Introduction to Biomedical Statistics**

An introduction to statistical procedures commonly used in the analysis of nursing research data, this course teaches the utilization of computers and statistical software in the analysis of data.

#### NSG 325

**Nursing Process V: Psychosocial Nursing** (Prerequisites: "C" or better in NSG 320 and "S" in

NSG 320A or see specific degree) This course demonstrates the relevance of psychosocial nursing concepts to all areas of professional practice. It provides a conceptual integration of the nursing process, theories, and research from the biopsychosocial sciences and humanities to promote mental health and provide care to elderly people and people with mental disorders. Concurrent enrollment in NSG 325A is required unless approved by the Department Chair.

#### NSG 325A

#### Nursing Process V: Psychosocial Nursing Clinical Laboratory

(Prerequisites: "C" or better in NSG 320 and "S" in NSG 320A or see specific degree)

Practical application of knowledge and skills required for nursing care of older adult and mentally ill patients with commonly occurring problems is demonstrated in both laboratory and clinical settings. Concurrent enrollment in NSG 325 is required unless approved by the Department Chair. Clinical Laboratory is graded on a Satisfactory/ Unsatisfactory basis based on successful completion of the course requirements.

#### NSG 340

#### Nursing Leadership and Management

(Prerequisite: "C" or better in NSG 325 and "S" in NSG 325A)

The primary purpose of this course is to facilitate the development of a broad view of the management of health care delivery systems and the nurse's role in that arena. Concurrent enrollment in NSG 340A is required unless approved by the Department Chair.

#### NSG 340A

## Nursing Leadership and Management Clinical Laboratory

(1.5 quarter unit) (Prerequisites: "C" or better in NSG 325 and "S" in NSG 325A) This course covers practical application of skills and knowledge required to coordinate care for multiple patients in a multidisciplinary setting. Concurrent enrollment in NSG 340 is required unless approved by the Department Chair. Clinical Laboratory is graded on a Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

#### NSG 403

## Theoretical Models and Conceptual Frameworks as a Basis for Nursing Practice

This course facilitates the practice of professional nursing by providing students with an opportunity to experiment with the application of various conceptual models in order to evaluate the impact of conceptual models on nursing practice.

#### NSG 404

#### Pharmacology for Nurses

In this course students will synthesize pharmacological concepts. An overview of the history of drugs will be presented along with current issues in drug legislation, design, testing, manufacturing, and marketing. Utilizing drug terminology, pharmacotherapeutics, pharmacodynamics, pharmacokinetics, contraindications and precautions for prototype drugs for multiple body systems will be discussed. Major emphasis will be placed on nursing management practices that minimize adverse effects and maximize therapeutic effects for patients, including the role of the nurse in pharmacological research.

#### NSG 410

#### Nursing in the Community: Population Focused Practice

(Prerequisite: NSG 411)

A study of community health nursing concepts as they apply to the health of individuals. Explores the nursing care of individuals in the community using primary, secondary and tertiary models of therapeutic intervention. This course includes a required clinical practicum.

#### NSG 411

#### Nursing in the Community: Frameworks for Practice

#### (Prerequisite: NSG 412)

A study of providing nursing care to families in the community. Explores nursing care using primary, secondary and tertiary models of intervention. This course includes a required clinical practicum.

#### NSG 412

**Nursing in the Community: Healthcare Delivery** (*Prerequisites: Completion of all 300-level nursing cours*es)

A study of community health nursing concepts as they apply to the health of groups and the community at large. Explores nursing care using primary, secondary and tertiary models of intervention. This course includes a required clinical practicum.

#### NSG 422

Introduction to Nursing Research

(Prerequisite: NSG 322 and completion of all 300-level nursing courses)

This course will introduce students to quantitative and qualitative research in nursing by reviewing and evaluating current research studies which use descriptive, correlational, experimental and selected qualitative designs. Throughout the course, an emphasis will be placed on the philosophical underpinnings of the quantitative and qualitative research paradigms. Students will also have the opportunity to critique pertinent research for utilization in nursing practice.

#### NSG 440

#### Issues in Professional Nursing

(Prerequisites: completion of all other required nursing courses)

A capstone course that explores the historical roots and current catalysts of complex issues of nursing education, practice and scholarship. Also analyzes

multiple interpretations of selected issues and strategies for resolving issues.

#### ODV – Organizational Development

#### **ODV 410**

#### Organizational Development, Career Systems, and Training and Development

A survey of organizational development, career systems, and training and development practices. The course explores and defines the origin and interrelationship of the three areas under the auspice of Human Resource Development. The exploration examines these areas as they relate to helping practitioners achieve organizational goals and increase effectiveness. Students learn about both theory and practice as it relates to their ability to assist individuals while seeking greater consonance between indi-vidual, group, and organizational change and growth.

#### **ODV 420**

#### Introduction to Organizational Behavior

An introduction to the impact that individuals, groups, and structure have on behavior within organizations for the purpose of applying such knowledge toward improving an organizations effectiveness. The course will focus on work-related behavior with an emphasis on individual and group performance as it relates to organizational productivity and processes. A central theme will be the development of "people" skills to help all employees- staff, front-line supervision, and management- improve their effectiveness

#### **ODV 600**

#### Theory and Practice of Organizational Development

The course overviews how, why, and when to integrate the behavioral sciences with human resource management principles to increase individual and organizational effectiveness. Students will analyze, evaluate, and design relevant theories as they relate to practical application in the workplace.

#### ODV 601

#### Integrating Performance Management, Technology, and Organizational Communication

This course examines and assesses how technology can best be integrated into and utilized in the workplace to maximize human performance. Implications for information management and organizational communication are investigated and classified. A key aspect is how the two components are impacted by organizational communication. It examines current trends in enterprise-wide technology solutions, specifically as they relate to HRM and OD, implementation of technology, productivity as it relates to use and misuse, and how it facilitates change in human performance and organizational growth.

#### **ODV 606**

#### Seminar in Training and Development

Employee development is the responsibility of the line manager, the human resources professional, and the employee. This course provides essential managerial-level comprehension of training theory and its practical applications in the business and management environment. Students learn the functions and duties of training: trainer/developer, the identification and assessment of training needs, program design and development, selection of delivery methods and means of instruction, the implementation of training programs, and evaluation. The course integrates training and development, organizational development and career development, critical components of Human Resource Development.

#### **ODV 608**

#### **Research Seminar in Current Issues/Trends in** Applied Organizational Development

This course is focused on a selected combination of published empirical research and current issues in

organizational development interventions and strategies. Articles for discussion will be drawn from journals and popular press in several fields, including economics, the behavioral sciences, management science, business administration, and elsewhere as they relate to the practice of organizational development interventions and techniques. Faculty will guide students through written review of research and current practices, and seminar discussions in order to assist the HRM and ODV Professional in their service as a change agent to company management.

#### **ODV 610**

#### Advanced Studies in Organizational Behavior in a **Diverse Society**

An in-depth review of current organizational behavior issues in the areas of workforce planning and performance management is covered as it relates to employee diversity. Using case studies, the course provides an integrated perspective of theory and practical aspects of interpersonal and group communication, organizational structures and system, and employee performance in the diverse workplace.

#### PAD – Public Administration

#### PAD 400

#### Introduction to Public Administration

A general survey course of the theory and practice of public administration, its legal and constitutional foundation and the role of the public administrator in public policy. The context of the discussions are based on the current issues facing administrators.

#### PAD 401

#### Public Policy Development

This course discusses the public policy issues facing communities and the role of the public administrator in implementing policy. Examines the role of community action groups in developing and influencing policies. Evaluates the impact of policy decisions on communities and the ethical issues surrounding decisions.

#### PAD 402

#### **Public Administration and Urban Environments**

This course explores the role urban environments play in the nation. Discusses the issues unique to cities and large metropolitan areas and the role of governments and public agencies in addressing the issues. Discusses the ethical issues facing public administrators in dealing with urban and rural environments

#### PAD 403

#### **Government and Community Relations** This course is an exploration of how to communicate with citizens in a positive and helpful fashion.

Discusses how to interact with community groups and the press and how to promote public understanding of, and support for, government activities.

#### PAD 404

Public Administration and the Nonprofit Sector The course discusses the theories and roles of nonprofits in public administration. It explores the relationships between nonprofits and the public sector; and sources of revenue. Discusses the public policies towards the nonprofit sector and the ethical issues surrounding the sector.

#### PAD 405

### Senior Research Project

Supervised senior project undertaken by students of public administration when they have completed all core courses in the program. Coordinated by fulltime faculty and chaired by a public administration faculty member chosen by the student from previous courses taken within the program. Students select a viable topic in public administration to research and then meet with their chair once a week for two months. Upon completion, students present their project to chair, other faculty and peers in an open forum. Accelerated study is not permitted with this course. PAD405 is two months in length. Students who do not complete the Senior Project within the two-month period are eligible, at the discretion of the instructor, to receive a grade of "IP with a maximum of a one-time, six-month extension. Students who do not complete the project at the end of the extension period will need to retake the course. No grade of "I" can be given for this course. Grading is by H, S, or U only.

#### PAD 620

#### Foundations of Public Administration

A general survey course covering the role of the public sector manager in American society today. Studies current issues and leading concepts in the field of non-profit management.

#### PAD 622

#### Seminar in Urban Affairs

An examination of influences affecting decisions in the urban political arena. Covers segments of the community that impact the decision-making process (i.e., employee groups, labor influences, community groups, media and other special interests). Examines the relationship between intergovernmental agencies.

#### PAD 626

#### **Public Personnel Policy**

An examination of the important aspects of personnel management in government, including civil service procedures, affirmative action, employee motivation and organizational development.

#### PAD 627

#### **Quantitative Methods in Public Administration** A practical study of graphical methods and statistical procedures specifically aimed at presenting, interpreting and solving problems related to public

administration. (This course cannot be substituted where MS 601 is required.)

#### PAD 631

#### **Urban Planning and Redevelopment**

An examination of historical development of urban planning practices and concepts, general plans and their elements in the urban community. Also discusses the use of technology in planning. Students must complete a minimum of five Public Administration courses prior to taking this course.

#### PAD 632

Financial Management and Grant Administration An exploration of current governmental fiscal management techniques and issues. Examines various types of financial and technical assistance to quasigovernmental and non-profit management organizations

#### PAD 640

#### **Public Finance**

An overview of the fundamental microeconomic analysis of policy issues in public finance, emphasizing taxation. Major topics include public good and externalities, tax incidence and equity and fiscal federalism.

#### PAD 641

#### Local Government Budgeting

A comprehensive, straightforward look at local government budgeting. Topics deal with include the advantages and disadvantages of various approaches to revenue projection, the collection and review of departmental proposals, the development of capital budgeting policy and other budgeting tasks. Also considered are budget implementation, accounting and financial reporting. A variety of methods for maintaining budgetary balance, preventing overspending and dealing with contingencies are presented and discussed.

#### PAD 642

#### Seminar in Public-Private Financing

An examination of financing partnerships between private businesses and public agencies such as school districts, college and university institutions and city and state governments. The course focuses on the design and construction of needed public facilities and the sponsoring of commercial redevelopment projects. Case studies provide detailed coverage of the complex process involve in taking a real estate project from conceptualization through construction.

#### PAD 643

#### Contract Negotiation in the Public Sector

An analysis of bargaining and negotiation principles and practices in the public sector. The course focuses on the financial issues of contract negotiations and labor relations. Case studies, simulation exercises, research projects and group discussions complement the presentation of theory and practical experience in developing effective negotiation skills.

#### PAD 644

#### **MPA Project**

(Prerequisites: Completion of six MPA core courses) A project where students work in teams or individually under the guidance of an assigned faculty advisor. Students clarify research topics and identify data sources in preparation for the project. Students then gather data and present their research in both written and oral form to faculty and classmates. Grading is H, S, or U only. PAD 644 is two months in length.

#### PED – School Psychology

#### PED 604

#### Orientation and Field Experience in School Psychology (1.5 quarter units)

An exploration of the field of School Psychology and its suitability as a personal career choice. Emphasis is on an understanding of the multiple roles of school psychologists that includes counseling, coordination and collaboration. Field experiences, using interviews and observations, will give students insight into their future vocations. Emphasis is placed on oral and written communication, and observational skills. Practicum experience is required. Grading is S or U only. All sessions must be attended or the course must be repeated.

### PED 637

#### Action Research

(Prerequisite: ILD 625)

This course is designed to provide the knowledge and skills required to generate and evaluate research relevant to various areas of professional education. The work of the educator will be emphasized throughout the course as students produce a major research and writing project. Students prepare a research proposal in their area of practice, obtain Institutional review Board (IRB) approval, conduct the study and prepare an oral and written report. Course include relevant aspects of professional writing while remaining focused on the practical needs of educators who wish to join the larger professional community in their field of specialty. This class is scheduled for two months one day a week and at the end of that time a grade of "IP" will be posted then the maximum length of time is 10 additional months. Note: Grading is H, S, or U only. Class size is 10.

#### PED 665

#### Test and Measurements

(Prerequisite: PED 604)

Cover's concepts of validity, reliability, norms, item analysis, and standardization; selection, administration, and interpretation of published psychological and educational tests; development of measurable goals by decision makers for various evaluation purpose, and the development and /or selection of tests, and collection of data.

#### PED 666

#### **Graduate Seminar in Human Neuropsychology** (*Prerequisite: PED 604*)

Explores the theories and analysis of brain function, structure, and brain behavior relationships.

#### PED 667

#### Graduate Seminar in Child and Adolescent Psychopathology

Examines the developmental, biological, psychosocial, and cultural variables in the etiology of behavioral disorders. Students will become familiar with characteristics, classification and diagnosis of behavioral disorders that are encountered in school settings.

PED 670

#### Graduate Seminar in Social Psychology

Focuses on how individuals are affected by, an in turn affect social processes. Topics include social cognition; social influences on beliefs, attitudes, and identity; conformity and persuasion; culture and gender; small group influences and processes; prejudice, aggression and conflict; interpersonal attraction and love. Application of relevant theory and research to educational concern and settings is made.

#### PED 671

#### Assessment of Cognitive Abilities

(Prerequisites: PED604, PED665 and PED680) Intensive practice in administration, interpretation and communication of results of assessment for metal ability. Emphasis is placed on the many aspects of interviewing, behavioral observation, interpretation, and integrating results into case studies.

#### PED 672

#### Advanced Psycho-educational Assessment (Prerequisite: PED 671)

Introduces students to the administration, interpretation, and communication of psycho-educational tests. Emphasis is placed on assessing the visual, auditory, language and sensory disorders. Focus is on achievement and process measures, as well as the development of curriculum-based assessment. Focus will be placed on interviewing and behavioral observation.

#### PED 673

#### **Emotional/Behavioral Assessment** (*Prerequisite: PED672*)

The third course in a sequence of five assessment courses. In this course behavioral assessment is contrasted with traditional academic and trait-oriented assessment and is designed to introduce and then strengthen student knowledge and understanding of Applied Behavior Analysis. Practical uses of behavioral assessment in applied context with children and adults are emphasized. This course is not an ABA Certificate course.

#### PED 674

#### **Preschool / Low Incidence Assessment** (*Prerequisite: PED 673*)

Emphasizes eligibility for special education that includes assessment of preschool children, diagnosis of disabling conditions, recommendations for remedial techniques and IEP development. The course is also designed to provide an introduction to the assessment of low incidence populations. Exceptionalities explored include Visually Impaired, Deaf and Hard-of-Hearing, Autistic Spectrum Disorders, Physically Impaired, Traumatic Brain Injured and Dual Sensory Impaired.

#### PED 675

## Alternative Assessment for Multicultural Populations

(Prerequisite: PED 674)

This is an advanced course that focuses on selection, educational implications, use of alternative assessment techniques, eligibility for special education, diagnosis of disabling conditions, recommendations for remedial techniques and IEP development. Students will discuss the role of primary language and socio-cultural variables on cognitive/educational development, the implications of psycho-educational assessment on least restrictive placement and integrating assessment materials for the purpose of writing psychological test reports.

#### PED 676

#### Introduction to Applied Behavior Analysis

Applied Behavior Analysis is a scientific based method of understanding human behavior and using that understanding to change socially significant behaviors. The field is based on over 50 years of scientific research on respondent and operant conditioning and its application to everyday situations. This course provides an overview of the major components – philosophical as well as applied – of Applied Behavior Analysis. Major topics include behavioral assessment, single-subject research design, basic principles of behavior shaping and reduction, how to achieve behavioral generalization and maintenance, aspects of stimulus control and its relation to the three term contingency model, discrete trial training, and aversive control. This course is not an ABA Certificate course.

#### PED 677

## Graduate Seminar in Curriculum Assessment and Intervention

(1.5 quarter units)

The focus of this class is to introduce school psychology students to a conceptual framework for assessing and evaluating a wide range of academic concerns within a problem solving approach using nontraditional academic assessment techniques commonly referred to as Curriculum-Based Measurement/Assessment. Students will learn the conceptual and theoretical framework underlying CBM and CBA, be taught to administer and interpret CBM/CBA assessment methods, and learn how the data serve problem solving and Response to Intervention (RTI) model models

#### PED 678

Practicum in School Psychology (3 quarter units) (Prerequisites: PED 671,,PED 672, PED 673, PED 674, and PED 675)

The purpose of the school-based practicum is to provide students with an orientation to school and community professional as well as to clarify the role of the school psychologist. The student will have the opportunity to observe school psychologists conduct psycho-educational assessments, develop behavioral interventions, participate in child study team meetings, and provide feedback to parents. Students are expected to gain experience working with children in a multitude of settings, including preschool, elementary, middle and senior high school as well as special education centers. Students are placed in a school setting and attend a university-based seminar. Grading is S or U only.

#### PED 680

#### Roles, Issues and Ethics in School Psychology

Introduction to professional, ethical, legal, theoretical, and practical aspects of School Psychology. Students will examine the roles and responsibilities of school psychologists, professional organizations, and associations. Historical and social context along with emerging professional issues and directions are included. National Standards and ethical guidelines for practice are examined.

#### PED 683

#### **Program Evaluation**

Provides an overview of current empirically-based programs addressing student needs such as reading difficulties, school safety, anger management and self-mutilative behavior reduction. Includes evaluation of site or district wellness and academic interventions.

#### PED 685

#### Best Practices Seminar in School Psychology (3 quarter units)

(Prerequisites: A record of a passing score on the CBEST and approval of internship site Placement Specialist. students mush have completed all program prerequisites, completion of PED coursework, 450 hours of practicum and have permission of the faculty advisor) Students will review the knowledge, skills, and standards of the graduate program in school psychology in final preparation for their employment as professional school psychologists. Student will prepare for the ETS Praxis examination, complete their program portfolios, and present their school project as part of this course. Grading is H, S, or U only.

**PED 687** School Psychology Internship I **PED 688** School Psychology Internship II PED 689 School Psychology Internship III **PED 690** 

#### School Psychology Internship IV

(Prerequisites: students must have completed all program coursework, must be enrolled in their internship and have permission of the faculty advisor) Students are placed in a school setting and expected to perform a variety of school psychology related activities for a minimum of 1200 hours. Grading is by S or U only.

### PED 694

#### Thesis

(Prerequisites: ILD 625 and an undergraduate or graduate statistics course. Students must have written permission of lead faculty to enroll in the course) This course is a supervised experience culminating in the completion of a thesis. The student prepares a research proposal, obtains Institutional Review Board (IRB) approval, conducts the study and prepares the written thesis. This class is scheduled for 2

months, meets once a week and at the end of that time a grade of "IP" will be posted then the maxi-mum length of time is 10 additional months. Grading is H, S, or U only.

#### PHL – Philosophy

#### PHL 100

Introduction to Philosophy

(Prerequisites: ENG 100/101) A study of the variety of ways of thinking about such fundamental issues as knowledge and belief, human nature, the nature of reality, the existence of supernatural being(s) and the relationship between self, mind and the body. Develops philosophical thinking skills and awareness of world philosophies.

#### **PHL 238**

Critical Thinking in Everyday Life

(Prerequisites: ENG 100/101)

An introduction to the skills needed to rationally and critically evaluate common forms of illogical reasoning, verbal sleights of hand and the use of language to distort and confuse. Emphasizes critical thinking in real-world applications involving adver-tising, politics, claims of the paranormal and controversial issues like abortion. Also covers the basics of deductive and inductive reasoning.

#### PHL 320

Comparative Religion +

(Prerequisites: ENG 100/101) A survey of major world religions in cross-cultural and historical perspective. Explores several tradi-tions, including Hinduism, Buddhism, Confucianism, Taoism, Judaism, Islam and Christianity. Also discusses the distinction between church, sect and cult; the experience of conversion; religious rituals, ceremonies and rites of passage; and the construction of legitimacy for contemporary new religions. May involve work in oral history.

#### PHL 326 Chinese Thought

#### (Prerequisites: English 100/101)

The traditions of Chinese Thought date back thousands of years to animistic and shamanistic sources embodied in The Classic of Changes, traditional philosophy, popular religious traditions, and medicine. Students will also learn about the core concepts and the development of Confucian and Daoist Thought. Buddhism entered China from India in the first century B.C.E. and absorbed aspects of these traditions, enjoying great popularity as a result. Students will learn how these traditions of thought continue to exercise influence in modern China.

#### PHL 332

#### **Religion of Islam** (Prerequisites: ENG100/101)

This course will deal with religion of Islam and its cultural influence in Central and South Asia, Africa, and the Near East. The course will examine the roots of Islam since Mohammed and its practices, literature, social and political movements of Islam later on. The issue of gender, treatment of other religions, and current Islam will be of special emphasis.

#### PHL 336 Philosophy of Science (Prerequisites: ENG 100/101)

A survey of major theories of science. Considers the nature of scientific knowledge, the roots of science in our everyday cognition and behavior, the relation of theory to experimentation, the social implications of science, the relation of physical to social science and the relation of science to technology.

#### PHL 339

#### Study of a Major Philosopher (Prerequisites: ENG 100/101)

An in-depth analysis of the writings of a major figure in the history of philosophical thought, with particular emphasis to be determined by the instructor in the context of the specific thinker chosen.

#### PHL 375

**Environmental Ethics** 

(Prerequisite: ENG 100/101) An exploration of the justification for moral and legal concerns with natural objects (including nonhuman animals). Examines humanitarian, ecocentric and utilitarian perspectives. Issues include animal rights, animal experimentation, factory farming, species extinction, habitat loss, pollution, conservation, industrialization and population control as well as Western cultural assumptions of worth and personhood.

#### PHL 437

Ethics

(Prerequisites: ENG 100/101) An examination of theories of value, ideological differences and conflicts and practical applications to clarify ethical differences. Emphasizes the dilemmas of personal and professional responsibility within a real-world context of business and workplace circumstances.

#### PHY – Physical Education

#### PHY 300

History and Foundations of Physical Education (Prerequisites: Preparation for the major courses) Focus is on the major developments in sports and physical activity from an international perspective. The major global issues and concerns confronting sports and physical education will be discussed. A multicultural approach to ethics and sport and physical activity will be explored.

#### PHY 305

Exercise Physiology (Prerequisites: SCI 201, 201A, 202, 202A) Focus is on the fundamentals of exercise physiology integrating scientific and clinical information on nutrition, energy transfer, and exercise training. Nutrition as the base for human performance, energy for physical activity, systems of energy delivery and utilization, enhancement of energy capacity, body composition, energy balance, weight control and exercise and environmental stress will be explored.

#### **PHY 310**

#### **Fundamentals of Movement**

(Prerequisites: PHY 305 Exercise Physiology) Focus is on the multilevel processes that contribute to the acquisition and control of motor movement skills. Theoretical models and principles will guide movement skills and activity in multiple settings. Practical applications will be emphasized.

#### PHY 315

#### **Dance Activities**

Focus is on different types of dance including folk, square, contra and social as physical activity. Description and direction for individual dances will be included. The cultural background of international dances will be explored.

#### PHY 320

## **Sports Psychology** (*Prerequisite: PSY 100*)

Focus is the theory of sport psychology. Application to specific sports will be explored. Motivating athletes, regulating stress, anxiety and arousal as well as aggression in sports will be explored. Team climate, cohesion and group dynamics, communication and counseling techniques, and coaching considerations are included.

#### PHY 325

#### Sociology of Sports

(Prerequisite: SOC 100)

Focus is on the sociology of sports including culture, social organization, socialization, deviance, small groups, collective behavior, mass media and interrelationships. Three central themes include: sport as a social institution, sport as a microcosm of the larger society, and institutional connections between sports and other social institutions will be explored.

#### PHY 400

#### Measurement and Evaluation in Physical Education

(Prerequisites: PHY 300, PHY 305, and PHY 310) Focus is on testing and training principles and tech-niques in physical education and exercise science. Measurement and evaluation techniques in a variety of activity settings from coaching to adult education and community programs will be explored.

#### PHY 405

#### Physical Education Activities

Focus is on the equipment, risks, skills and techniques, teaching and learning strategies for selected physical activities. Over 30 physical activities will be explored.

#### **PHY 410**

#### Physical Education for Elementary Students

Focus is on techniques for teaching physical activity in elementary school including games and activities suitable for every developmental level. The theoretical basis for program development will be explored. How to integrate activity with academic subjects such as math and spelling will be discussed ..

#### PHY 415

Physical Education for Secondary Students Focus is on the design of innovative and creative physical education for adolescents. The latestresearch based methods for presenting sports in physical education will be explored. Youth culture, voice, and choice will be examined.

#### PHY 420

#### Introduction to Adaptive Physical Education

Focus is on an exploration of physical and motor functioning, consideration of the individual learner, emphasis on what learners can do, and collaboration to meet the needs of individuals with special needs.

#### **PHY 440**

#### Standards Based Physical Education

Focus is on the National Association Students in Physical Education for K-12 standards. Curriculum development using a thematic approach will be explored. Performance-based assessment will be discussed.

#### **PHY 490**

#### **Physical Education Capstone Project**

(Prerequisites: Completion of 40 quarter units of core courses in the major)

This two-month capstone project undertaken by physical education students when they have completed the core courses in the program provides an opportunity for the student to practice the skills learned in the program Students will also design and participate in a collaborative service learning experience in a physical education setting in the community or a school. Students will complete the portfolio of their work from core courses and revise as needed to create an impressive final portfolio that can be used. Grading is H, S, or U only. Students who do not complete the project within the twomonth period are eligible to receive a grade of "I" with a maximum of a one-time, six-month extension. Students who do not complete the project at the end of the extension period will need to retake PHY 490.

#### PLA – Paralegal Studies

#### PLA 301

#### Legal Theory and Ethics

Note: This is a mandatory first course for all new students in all programs. Introduction to the nature of the law and the legal system and an overview of areas of legal practice. Focus on legal problem solving, case analysis, fact pattern analysis, selected topical surveys of law, and legal ethics and professional responsibility for the legal assistant.

#### PLA 302

#### Computers and the Law

This course will teach computer technology as a tool to assist the legal professional in the practice of law. The class utilizes lecture, group discussion, and hands-on computer usage. Using the latest software for time and billing, case management, docketing control, and litigation support, students will tackle legal projects with assignments in the computer lab. Students will learn how to effectively evaluate vendor products as well as design and manage a litigation database project. Also covered are telecommunications and computer-assisted research, such as Lexis, Westlaw, and CD-ROM databases. Ethical considerations, such as software piracy, misuse of software and databases, security, and the protection of client data are reviewed.

#### PLA 303

#### Law Office Administration

A study of the organization and functioning of the law firm. Topics include behavioral aspects; financial planning and management; problem-solving techniques and promoting change; personnel administration, including job descriptions, hiring practices, orientation and training techniques; and salary administration and productivity measurement.

#### PLA 305 Property

The law relating to the various types of real-property interests and estates, methods of transferring title, recording statutes and title searches, the nature and scope of easements, leasehold interests, the rights and obligations of landlords and tenants, the law of adverse possession, and covenants regarding title.

#### PLA 306 Torts

A survey of the fundamental principles of the law of intentional torts (e.g., battery, assault, false imprison-ment, intentional infliction of emotional distress); negligence (standard of care, breach of duty, causation, damages); strict liability; as well as the torts of nuisance, defamation, invasion of privacy torts; and the defenses to each of these torts. Also, concepts of products liability and vicarious liability will be addressed.

### PLA 308

#### Contracts

A study of basic contract principles, including formation, validity, defenses to formation, rights of third parties, performance, breach, remedies, and damages. Case analysis and application of principles are emphasized. Selected code sections from Article 2 of the Uniform Commercial Code and the Restatement Second of Contracts are also covered.

#### PLA 309

#### Directed Research and Writing A

In this course, students will develop legal research skills by completing focused exercises in the use of case reporters, digests, annotated codes, Shepard's, A.L.R., legal encyclopedias, periodicals, and treatises. Students are also exposed to the latest methods of computerized research. Furthermore, students will practice writing skills by drafting various types of documents. In addition, students will learn case analysis by practicing the art of reading court opinions. They will also learn legal citation. Special emphasis is placed on English grammar, punctuation, writing mechanics, spelling, and composition.

#### PLA 310

#### Directed Research and Writing B

This is an advanced course in legal research and writing. Students develop and practice research strategies by integrating manual and computer-assisted legal research. Students review research in printed sources (reporters, digests, annotated codes, Shepard's, A.L.R., legal encyclopedias, periodicals, and treatises). Further, students are challenged to complete research projects with a view to practice book research, to incorporate computer research, and to develop strategies in approaching legal research problems. Students communicate the results of their research in the form of memoranda.

#### PLA 311 Internship

A course designed to provide students with on-thejob experience. Students are placed in private law firms, government agencies, and corporate law departments. Placements are available in a wide area of legal specializations. Ninety hours of fieldwork and 15 hours of class sessions are required. Students who are unable to enroll in the credit course may apply for consideration as a non-credit intern. The School will assist those students with finding internship positions, but class sessions and supervision of the commitment are not provided.

#### PLA 314

#### Workers' Compensation

A study of the basic principles of California Workers' Compensation law, including eligibility, compensation coverage, medical treatment, compensation payments, permanent disability, death benefits, settlement, vocational rehabilitation, benefits, procedural matters, and the preparation of documents and forms from both the applicant and defense positions.

#### PLA 315

#### **Bankruptcy Law and Procedure**

A study of the substantive law of bankruptcy and its application, including voluntary and involuntary liquidations, discharge of debts, exemptions, creditors' claims, bankruptcy courts, officers and trustees, reorganizations, Chapter 13 plans, and alternate insolvency proceedings. Emphasis is on the preparation of documents and forms.

#### PLA 316

#### Entertainment Law

A course designed to familiarize students with the legal aspects of the entertainment industry, emphasizing the role of the legal assistant in preparing and monitoring legal documents. Material covered includes documents used in the acquisition of music rights, agreements used during the production of a motion picture, analysis of distribution and exhibition contracts, financing agreements, and complete review of the "old" and "new" copyright laws.

#### PLA 317

#### Immigration Practice

This course introduces students to the law regarding citizenship, naturalization, and immigrant and nonimmigrant categories. The course also examines the grounds for removal prior and subsequent to entry, as well as relief from removal. After acquiring a foundation in the substantive law, students complete assignments designed to give them practical exposure to immigration forms and documents.

#### **PLA 318**

#### **Remedies and Judgments**

This course is designed to familiarize the legal assistant with the substantive and procedural aspects of remedies and enforcement of judgments. The first part of the course comprises a study of legal and equitable remedies, including damage, restitutionary, coercive, and declaratory remedies. The second part includes an examination of prejudgment (provisional) remedies (attachment, claim and delivery, and receiverships), and procedures for the enforcement of judgments (writ of execution, wage garnishment, specific exemptions, and other enforcement tools).

PLA 324

#### **English for Professionals**

This course is designed to teach legal professionals to write well. It is an advanced course in Standard American English and composition. Students work through focused exercises in grammar, punctuation, and writing mechanics. They complete assignments designed to build vocabulary and teach correct usage. Students write-crafting sentences, developing paragraphs, and drafting entire discourses. This is an upper-division general-education course. It is a required core course for all paralegal students enrolled in any of the three programs.

#### PLA 335

#### **Employment Law**

This course is designed to provide the student with an introduction and understanding of the laws concerning the employment relationship including what constitutes an employee, at-will employment, termination of employees, employee rights, wage and hour regulations and employee privacy issues. This course will also provide the student with an introduction to employment discrimination laws and regulations concerning sexual harassment, race discrimination, disability discrimination and age discrimination.

#### PLA 404

#### Wills, Trusts, and Estate Planning

A study of the laws concerning intestate succession, wills, and trusts (with an emphasis on California law), the principles of federal estate and gift taxation, and the relationship of succession and taxes. Students learn how to draft wills, trusts, codicils, and trust amendments and how to do death tax projections.

#### PLA 407

Family Law I The law of family relations, including the law of marriage, annulment, dissolution, judicial separa-

tion, spousal and child support, legitimacy of children, custody, adoption, the classification of separate and community property, and problems arising from the dissolution of the marital community.

#### PLA 413

#### Juvenile Law and Procedure

A study of procedural law and substantive law relating to the special status of minors in our society. The emphasis of this course is Juvenile jurisdiction in three areas: Incorrigibility, Dependency, and Delinquency. Students learn the unique aspects of representation of juveniles, including interviewing, preparation of disposition reports, and development of files of alternative treatment programs. A term project and field trips to court and various juvenile facilities develop the skills needed for a legal assistant to work in this field.

#### PLA 421

#### Family Law II

This course covers advanced issues of family law including marital settlement agreements, domestic violence, enforcement techniques, tax issues, prenuptial agreements, paternity law, the Uniform Child Custody Jurisdiction Act and the Uniform Interstate Family Support Act. Emphasis will be placed on familiarization with California Judicial Council Forms, pleading preparation, research, and internet tools.

#### PLA 425

#### Litigation I

This course focuses on civil procedure in both state and federal courts. Topics covered include jurisdiction, venue, parties, third parties, pleadings and motions, and analysis of civil-litigation strategies. The role of the paralegal in discovery is stressed and the course includes discussion of various forms of discovery, including depositions, interrogatories, and demands to produce documents. Students will discuss privileges, including the attorney-client privilege and the attorney-work-product privilege. Trialsetting and related matters are also discussed.

#### PLA 426

Litigation II

(Prerequisite: PLA 425)

This course focuses on the trial process in civil litigation, with a special emphasis on the law of evidence. The course includes a brief review of the civil-procedure process leading up to trial. Students will examine the role of the paralegal at trial, analyze the use of testimony by expert witnesses, and discuss the practical problems associated with the use of documentary evidence at trial. Settlement and negotiation strategies, trial briefs, motions in limine, and other related documents will be covered. The course also includes a brief overview of the law of judgments and the process of appeals.

#### PLA 427

#### Probate and Estate Planning I

(Recommended: PLA 404)

This course covers the following: basic property concepts (the basic differences of community, quasicommunity, and separate property; recognition of probate assets and non-probate assets; the differences between joint tenancy and tenancy-in-common; trust assets; fringe benefits; insurance proceeds); non-probate procedures (clearing title to joint tenancy, the various summary administration procedures, and spousal property petitions); and probate procedures (initiating administration; jurisdiction and venue; intestate succession; preparation of petition and other documents; review of will, notice requirements, Independent Administration of Estates Act, ancillary probate; and the necessity of maintaining a calendar or tickler system).

#### PLA 428

#### Probate and Estate Planning II

This course covers the following material: Asset accumulation, management, and creditors' claims,

location and marshaling of assets of the estate; preparation of inventories; function of probate referee; review of procedures for payment of debts and creditors' claims; study of management of estate assets; sales of real businesses; and family allowance. This course also covers miscellaneous court proceedings and termination of proceedings: will contests, contract to make a will, quiet title actions, buy-sell agreements, options, redemptions, and partition. Preparation of a court accounting and petition for final distribution, discharge of representation, and statutory fees.

In addition, the course will review special petitions: Petition under Probate Code Sec. 9860, petition for instructions, petition to determine distribution rights, nunc pro tunc orders, settlements, preliminary distributions, and report of status of administration of estate.

#### PLA 429 Corporations I

This course covers formation and structure of corporations, analysis and preparation of initial and amended articles of incorporation, satisfaction-of-filing requirements, drafting of by-laws, minutes of first meetings, initial stock-issuance documents, and waivers and notices of meetings; and documents relating to internal management of corporation affairs, analysis of employment agreements, stock options, buy and sell agreements, stock restriction agreements, resolutions authorizing cash and stock dividends and stock splits, and preparation of resolutions and certificates relating to liquidations and dissolutions.

#### PLA 430

Corporations II

Prerequisite: PLA 429

This course covers regulation of sale of securities (analysis of the requirement of the forms and supporting materials for the registration of securities for California, preparation of California exemption forms, and an overview of the federal securities laws); and acquisition and merger agreements (analysis of different types of acquisitions and mergers, statutory requirements of such transactions, and the customary range of provisions that appear in such agreements).

#### PLA 431 Real Estate I

(Recommended Prerequisite: PLA 305) The course covers ownership of real-estate leasing (extensive analysis and preparation of residential, commercial, and industrial leases); purchase and sale of real estate (analysis and study of common documents relating to the purchase and sale of real estate, including standard broker listing agreements, deposit receipts, offers to purchase, escrow instructions, deeds, title insurance, and surveys); financing and secured transactions (study of types and provisions of security devices, including deeds of trust and land-sale contracts; review of various methods of financing, including all-inclusive deeds of trust; analysis of various provisions of security devices, including due-on-sale, subordination, reconveyance, and prepayment; and the remedies available to holders of securities devices).

#### PLA 432

Real Estate II

Prerequisite: PLA 431 This course covers condominiums, planned-unit developments and cooperatives (analysis of the basic law relating to these forms of ownership, the basic constituent documents and regulations by the Department of Real Estate); land-development regulation (study of zoning laws, Subdivided Lands Act and Subdivision Map Act, and the several forms relating to these regulatory schemes); and miscellaneous topics, such as mechanics' liens, the impact of the bankruptcy laws on lenders, landlord remedies, and toxic hazardous waste considerations.

#### PLA 433 Criminal Law I

This course introduces students to criminal law. Topics covered include the criminal law system and the paralegal; components of a crime; elements of crimes; inchoate crimes; defenses; intake; and drafting the complaint.

#### PLA 434

#### Criminal Law II

This course covers criminal procedure. Topics covered include search and seizure; confessions and pretrial identification procedures; pretrial: from the initial appearance to seeking extradition; pretrial: grand jury to pretrial conference; trial: rights, procedure, tasks; sentencing; punishment; and review.

#### PME – Project Management

#### PME 601

**Planning, Performing, and Controlling Projects** (*Prerequisites: ENM 600, ENM 601, ENM 602, and ENM 603*)

This course introduces the in-depth theory and practice involved in the design and management of projects. It guides students through a systematic approach to project evolution-concept, study, design and implementation. This course also covers more than fifty case studies taken from real companies illustrating successful and poor implementation of project management. In addition, the latest developments in the field such as intricate framework of organizational behavior and structure, global project management, the project management maturity model, "six sigma", and conflict resolution modes will be covered.

#### PME 602

#### Managing Engineering Competencies and Skills (Prerequisites: ENM 600, ENM 601, ENM 602, and ENM 603)

This course focuses on human resource aspect, in particular, modern concepts and practical guidelines for leading people effectively and confidently towards challenging project and organizational objectives. The concepts behind dealing with diverse project teams, issues of delegation, empowerment, accountability, control, commitment, organizational linkages, alliances and the intricacies of matrix management will be studied.

#### PME 603

#### Product Management

(Prerequisites: ENM 600, ENM 601, ENM 602, and ENM 603)

This course focuses on project management aspects related to product management. This course covers three major tasks facing today's product managers namely analyzing the market, developing objectives and strategies for the product or service in question, and making decisions about price, advertising, promotion, channels of distribution and service. Product management utilizes the familiar marketing plan as the unifying framework for its lessons, and takes a "hands-on" project approach toward preparing graduates to assume the position of product management.

#### PME 604

#### Project Financing and Associated Financial Management

(Prerequisites: ENM 600, ENM 601, ENM 602, and ENM 603)

This course focuses on financial management related to management of projects. This course discusses essential concepts in finance related to project management such as accounting statements and their interpretation, forecasting, risk and return, time value of money, project budgeting, and project finance management such as working capital, cash flow management, accounts receivables and inventory and global finance management.

#### POL – Political Science

#### POL 100

#### Introduction to Political Science

(*Prerequisites: ENG 100/101*) A broad overview of the field of political science including main issues and central questions studies by political scientists and methods used to gain knowledge about politics. A survey course designed to acquaint the student with selective concepts, theories, and of political process.

#### POL 201

#### American Government and Politics

(Prerequisites: ENG 100/101)

A critical introduction to the structure of American government. Topics include classical and modern democratic theories, constitutionalism and federalism; the political process, including the mass media, voting behavior and political parties and interest groups; the institutions of government; the courts, civil liberties and civil rights; and public policy. (Includes study of the Constitution)

#### POL 320

**Politics of Social Movements** 

(Prerequisites: ENG 100/101)

A global survey of the processes of social and political awareness, mobilization and the development of participation by minorities and other colonized populations. The course emphasizes the sources of political instability in Africa, the Middle East, the Caribbean, Latin America, the United Kingdom and the central European nations.

#### POL 330

#### **Political Theory**

(Prerequisites: ENG 100/101)

The course is a survey of political theory and major figures in the history of political philosophical thought. Questions concerning the role of government and the relationship between government and individuals are explored.

#### POL 340

Comparative Politics

(Prerequisites: ENG 100/101) A study of selected foreign states from among industrial, developing, and under developing states, and their development, organization, administration, and politics; introduces students to analytical methods used to compare political systems and governments; explores several issues, including democratization, economic development, political culture and political change.

#### POL 350

International Relations

(Prerequisites: ENG 100/101) A survey of the nature of the international system and the theoretical framework used by political scientists to examine it; in particular, this course focuses on the decision-making process within the international arena. International negotiation and decision-making are utilized.

### POL 360

Public Policy

(Prerequisites: English 100/101) An introduction to the public policy process in the United States, theory and practice of process of formulating public policy, why some problems reach the public agenda and why others are rejected, examination of policy making at the national, state and local level, and public policy in foreign political systems.

#### POL 400

#### European Politics

(Prerequisites: ENG 100/101)

This course provides an introduction to European politics, with emphasis on political institutions and politics of Western and Eastern European states, as well as the institutions and policies of the European Union (EU).

#### POL 410 Middle Eastern Politics

#### (Prerequisites: ENG100/101)

Historical examination of the Middle East region, focusing on the key social forces and the sources of conflict; exploration of the Israeli-Palestinian conflict in-depth and the peace process; exploration of the U.S. involvement in Iraq and elsewhere in the Middle East.

#### POL 415

#### **Petroleum and the Persian Gulf** (*Prerequisites: English* 100/101)

This course is an introduction to modern day issues in the Persian Gulf. Among the variety of issues presented and discussed, particular attention will be given to social, intellectual, and political contexts from which these works have originated.

#### POL 418

Modern Economy and Government of China (Prerequisites: ENG 100/101)

This course is a survey of major political and economic events in the history of the People's Republic of China. The continuing lead-role of the Chinese Communist Party and the recent ideological shift from Marxism-Leninism towards Nationalism as its core ideology will be examined, as will the continuing domestic and international affects of ongoing Economic Reform and Opening Up policies. Developments in the People's Republic of China's political and economic position on the world stage will also be studied.

#### POL 490

#### Guided Study

(1.5-4.5 quarter units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

#### POL 499

Capstone Seminar

(Prerequisites: English 240 and completion of at least 27 units of core courses in the major.)

The subject of the capstone seminar is to emphasize the study of some aspect of the political science discipline. Students will critically review various concepts, theories, approaches and methodologies and will employ a particular theory and methodology to research and write a substantial research paper. The paper will involve original research or a critical review of the literature and will be presented orally to the members of the seminar upon completion. Grading is H, S, or U only.

### POL 539

#### **Dynamics of World Politics**

An examination of international relations and politics, the factors underlying international crises from different theoretical perspectives and the future of the global community. Explores the historical and intellectual antecedents of contemporary world events.

#### POL 540

#### The American Political System

A look into the origins and development of the American political system with special emphasis on aspects of democratic theory and practice, political parties, interest groups, public opinion and political ideology and political economy. Students are encouraged to pursue topics of particular interest.

#### PSY – Psychology

See also courses listed under CHD (Chemical Dependency) and HUB (Human Behavior).

#### PSY 100

#### Introduction to Psychology

A survey of the field of psychology as it relates to an understanding of human behavior.

#### PSY 301 Child Development

#### (Prerequisites: ENG 100/101)

Familiarizes students with the foundational theories of human development, current research directions in developmental psychology, major developmental perspectives and research approaches in developmental psychology and issues surrounding diversity, emphasizing an ecosystemic model of thinking about and understanding children and their development. In addition to the previous topics, the following areas will be discussed: the history of childhood; developmental theories and appropriate practices in education; play as a medium for learning and development; and the field of discipline particularly as it relates to development, behaviors and considering temperament in children.

#### PSY 340A

#### Effective Counseling Techniques I

(Prerequisites: ENG 100/101 and PSY 100) An introduction to basic counseling techniques, such as nonjudgmental listening, reflection, feedback, goal setting and basic solution skills. Examines concepts of transference and counter transference and emphasizes therapist attributes such as empathy, congruence, acceptance, genuineness and respect. Includes theory and practice within scope of the course. Grading is S or U only.

#### **PSY 340B**

#### **Effective Counseling Techniques II** (*Prerequisite: PSY 340A*)

An examination of intermediate counseling techniques, including imagery, role-playing, confrontation, and crisis management. Focus is on application of techniques applied to clinical, non-clinical and culturally diverse populations. Students will gain practical experience through in-class demonstrations and role plays. Grading is S or U only.

#### PSY 426

#### History of Psychology

(*Prerequisites:* ENG 100/101 and PSY 100) Contemporary psychology derives from two main sources: (1) the rise of the scientific method and worldview in Western Europe during the modern era and (2) perennial issues in philosophy throughout its entire history in the West. This course reviews influences from both sources on the development of psychology, especially in America.

#### PSY 427

#### Biological Psychology

(Prerequisites: ENG 100/101 and PSY 100) A study of the role of biological structures and processes in normal and pathological psychological functioning. Topics include attention, memory, mood, emotions, inhibitory and impulse control, sexuality, intellectual development, thought disorder and social behavior.

#### PSY 428

#### Developmental Psychology

(Prerequisites: ENG 100/101 and PSY 100) An examination of the developing personality, including personal identity, cognition, language, social skills, relational capacities, gender and role learning and socialization for the entire life span.

#### PSY 429

#### Introduction to Personality Theory

(Prerequisites: ENG 100/101 and PSY 100) The study of psychological characteristics of the individual that endure in stable form for substantial periods of time. Examines influential theories of personality and supporting research.

#### PSY 430

#### Introduction to Psychopathology

(Prerequisites: ENG 100/101 and PSY 100) The study of social-cultural views of normalcy/deviance and theoretical and clinical views of healthy/pathological psychological functioning. Examines classification and research in psy-

chopathology within psychology and psychiatry.

#### **PSY 431**

## **Theories and Techniques of Psychological Testing** (*Prerequisites: ENG 100/101 and PSY 100*)

An introduction to theories and principles of psychological testing and measurement and to a variety of standardized tests of intelligence, personality, achievement, interest, neuropsychology and other areas. Emphasizes the principles by which tests are constructed and validated. Also examines controversies regarding the valid, appropriate and fair use of psychological tests.

#### PSY 432

#### Social Psychology

(Prerequisites: ENG 100/101 and PSY 100) A study of the responsiveness of individuals to various sources and forms of social influence. Major areas of study include persuasion, conformity, obedience, prejudice, attitude formation and change, social behavior, altruism, aggression and the influence of the mass media. Emphasizes social circumstances rather than variations in personal characteristics, as in personality theory.

#### PSY 433

**Cognitive Psychology** (Prerequisites: ENG 100/101 and PSY 100) The study of psychological functioning in the area of mental operations, largely uninfluenced by individual differences in personality or motivation. This encompasses the areas of attention, pattern recognition and other perceptual achievements, memory, problem solving, categorization and concept formation, language acquisition and use, textual interpretation and decision making.

#### **PSY 434**

#### Psychological Research: Philosophy, Methods, Ethics

(Prerequisites: PSY 435)

A survey of core issues involved in scientific psychological research. Includes the study of the nature of explanation in psychology, the role of theory in research, the connection between research findings and theory, the distinction between experimental and other forms of research, the design of experiments, threats to the validity of research findings, operationalizing psychological concepts in a manner that yields quantitative data and ethical considerations in terms of confidentiality, informed consent and the possibility of doing harm to subjects.

#### PSY 435

Analysis of Data in Psychological Research (Prerequisites: ENG 100/101, PSY 100 and MTH 210) A study of how conclusions are made on the basis of submitting research data to statistical tests. The general area is called inferential or inductive statistics. Covers methods for analyzing parametric and nonparametric data, single-group and multiple-group sources of data and data derived from one source of information and multiple sources of information.

#### PSY 436

#### **Computer Applications in Psychology**

(Prerequisites: ILR 260 and PSY 435) A survey of the uses of computers in psychology, including the application of computers in psychological research and the analysis of statistical packages for the social sciences. Also considers computer-aided instruction. Lecture and laboratory format.

#### PSY 437

**Theories of Psychotherapy** 

(Prerequisites: ENG 100/101 and PSY 100) A presentation of clinical theories of treatment that correspond to theories of psychopathology, personality and development already encountered in courses under such titles. Topics include specific treatment approaches, the nature of the therapeutic relationship and how it effects change and therapeutic interventions.

#### PSY 438

#### Introduction to Group Counseling (Prerequisites: PSY 340A and PSY 340B)

A basic examination of the dimensions of group process, dynamics, and practice is the emphasis in this course. Focus is on effective strategies and procedures for facilitating group process practiced by clinicians in the counseling as well as practitioners in human services, criminal justice, behavioral analysis business and education. Opportunities to practice effective strategies with children, adoles-cents, adults and the elderly will be part of classroom experiences.

#### PSY 439

**Counseling Diverse Populations** (Prerequisites: PSY 340A, PSY 340B and PSY 438) An introduction to diversity and multicultural perspectives in psychology, and their impact on counseling practices. Focus will be on dimensions of culture, ethnicity, life style, religion, gender, identity development models and the effects of privilege and oppression on individuals and groups. Basic multicultural counseling competencies will be presented, with opportunities for student self-examination and practice of strategies and techniques.

#### PSY 460

#### Introduction to Addictive Disorders

(Prerequisites: ENG 100/101 and PSY 100) An overview of the nature of addictive disorders, including the various theories regarding etiology, development and psychopathology of such disorders. Also covers the etiology, diagnosis, assessment and treatment of compulsive gambling and nicotine addiction

#### **PSY 480**

#### Senior Project

(Two-month, 4.5-unit course)

(Prerequisite: Completion of all other core courses) Development of a major cumulative paper integrating what students have learned in the program with an applied area of student interest. Covers empirical or theoretical study of specific topics in psychology with an emphasis on independent and creative activity. Students meet in seminar format to present work in progress for discussion.

#### PSY 491

#### **Guided Study for Honors Students** (Two-month, 4.5 quarter units)

(Prerequisites: Completion of core courses with a GPA of 3.75 or higher, and the approval of the Department) In this capstone course students will design a research project under the direction and supervision of a faculty member. The research project will include data gathering, data analysis and interpretation of data and will be written in APA style and format. Grading is H, S, or U only.

#### **PSY 623A**

## Individual Psychotherapy and Clinical Assessment

#### PSY 623B

#### Individual Psychotherapy and Clinical Assessment ш

#### (Prerequisite: PSY 623A)

Explores the realm of mental illness from the perspectives of etiology, diagnosis, classification and treatment. Covers relevant contextual issues often considered to be related to etiology and treatment. These include neurobiology, culture, family and development. Also covers post-modern considerations regarding pathology and treatment. These two courses introduce students to central features of psychotherapy and assessment, with a particular focus on adult psychotherapy. Students are expected to acquire and practice knowledge and skills related to development of a good therapeutic relationship; assessment, including DSM diagnoses and case formulation; treatment planning which links case formulation, theory, and clinical research outcomes to the methods and goals of psychotherapy; and the therapist's role in promoting communication, insight, and behavior change within the therapeutic setting.

#### PSY 624

#### Assessment Techniques for Marriage and Family Therapists

Acquaints students with the various informationgathering techniques used in clinical practice for the purposes of diagnosis and treatment planning. Emphasizes building conceptual and practical bridges between initial presenting symptoms, diagnosis and treatment planning.

#### PSY 626

#### Human Sexuality in Psychotherapy

An exploration of human anatomy, physiology, sexual response cycle and the current theories and techniques used to treat sexual dysfunction. Provides students an opportunity to develop skills with these techniques and confront personal biases. Covers issues such as lifestyle, gender choice, gender roles, stereotyping, religion, contraception, HIV, AIDS and physical challenges.

#### PSY 627

#### Legal and Ethical Issues in Marriage/Family Therapy

An examination of the professional laws and ethics pertaining to the practice psychotherapy and the content of these legal and ethical codes, the meaning of these tenets and the underlying principles involved

#### PSY 628

Principles of Psychotherapy III: Group Approaches A comprehensive study of the major approaches, techniques and interventions used in group psychotherapy. Also emphasizes dynamics of group process including the types, stages and formation of groups.

#### PSY 629A

#### **Developmental Contexts in Psychotherapy:** Adulthood and Aging

An opportunity to examine major topics in adult development and aging as they relate to the practice of psychotherapy. Includes developmental challenges and tasks unique to adult life, theories which assist in understanding the adult experience, issues related to work and career and the impact aging has on individuals and society.

#### PSY 631A

#### Practicum I: Marital and Family Therapy

A focus on integrating and applying the full range of theoretical models used in individual, couples and family psychotherapy. Students gain practical experience with both process and content issues through in-class role playing and demonstrations and receive both instructor and peer feedback. Grading is S or U only.

#### PSY 631B

#### Practicum II: Marital and Family Therapy (Prerequisite: PSY 631A)

A two-part field practicum in which students work as MFT trainees under the supervision of a licensed therapist. Students also participate in an academic seminar at the University. Students select an approved practicum site and accumulate 200 hours psychotherapy experience that includes 150 hours of of face-to-face work with clients during a six-month period. Regular course work continues during this period. The academic seminar meets two hours per week and runs concurrently with onsite work. Seminar work focuses on professional and training issues, including process issues, case conceptualization, oral, written and videotaped presentations and integration of relevant research. onsite psychotherapy and supervision hours can be used as partial fulfillment of MFT licensing hours. Grading is H, S, or U only. This six-month seminar may meet in the late afternoon outside of regular class hours.

#### PSY 631C Practicum for MFT Trainees II (4 quarter units)

A field practicum where students work as MFT trainees at an approved practicum site, under the supervision of a licensed therapist who meets the Nevada State Board of Examiners for MFT and AAMFT requirements for clinical supervisors. Students must also participate in an academic seminar at the University. They must complete 100 hours of psychotherapy experience, which includes 75 hours of face-to-face work with clients over a minimum of three months. The academic seminar meets for 12 two-hour sessions and runs concurrently with the field work. Seminar work focuses on professional and training issues, including case conceptualization and oral, written, and /or videotaped presentations and integration of relevant research. Grading is on a satisfactory/unsatisfactory basis. This threemonth seminar may meet in the late afternoon outside of regular class hours.

#### PSY 631D

#### Practicum for MFT Trainees III (4 quarter units)

A field practicum where students work as MFT trainees at an approved practicum site, under the supervision of a licensed therapist who meets the Nevada State Board of Examiners for MFT and AAMFT requirements for clinical supervisors. Students must also participate in an academic semi-

nar at the University. They must complete 100 hours of psychotherapy experience, which includes 75 hours of face-to-face work with clients over a minimum of three months. The academic seminar meets for 12 two-hour sessions and runs concurrently with the field work. Seminar work focuses on professional and training issues, including case conceptualization and oral, written, and /or videotaped presentations and integration of relevant research. Grading is on a satisfactory/unsatisfactory basis. This threemonth seminar may meet in the late afternoon outside of regular class hours

#### **PSY 632A**

#### **Couples/Family Therapy A**

Part one of a two part sequence. Part one of the sequence is designed to provide a comprehensive look at the theories, strategies, techniques, problems and critical issues involved in working with families. This course will provide an historical overview and a focus on theoretical approaches to the treatment of families. Teaching strategies for this course will include lectures, demonstrations, discussions, videotapes and role plays. Course is eligible for an In Progress (IP) grade.

#### PSY 632B

Couples/Family Therapy B (Prerequisite: PSY 632A)

Part two of a two part sequence. Part two of the sequence is designed to provide a comprehensive look at the theories, strategies, techniques, problems and critical issues involved in working with couples. This course will provide a historical overview of the major perspectives in the treatment of couples, a survey of recent research on marriage and marital therapy, and a focus on major approaches to the treatment of both married and unmarried couples. Teaching strategies for this course will include lectures, demonstrations, discussions, videotapes and role plays. Course is eligible for an In Progress (IP) grade.

#### PSY 635

#### Developmental Contexts in Psychotherapy: **Childhood and Adolescence**

A seminar focusing on the application of developmental theories and research to the clinical practice of assessment, diagnosis and treatment of children and adolescents. Considers all areas of the developmental process will be considered in addition to issues surrounding diversity, gender and other relevant contexts. Addresses differences between normal developmental transitions, adjustment reactions to

life events and/or trauma and deviations in development.

#### PSY 636

#### Principle of Psychotherapy II: Child and Adolescent

An examination of theories, techniques and empirical findings essential to the treatment of children and adolescents. Emphasizes the developmental, cultural and family parameters necessary to conduct successful treatment. Students gain experience with a variety of diagnostic and treatment techniques tailored to the particular age and developmental levels of children and adolescents through in-class experiential activities.

#### PSY 637 **Principles of Psychotherapy V: Cultural** Competencies

An exploration the role of culture in psychotherapy. Emphasizes the development of a culture-centered approach to psychotherapy by integrating multicultural awareness, knowledge and skills into assessment, diagnosis and treatment.

#### PSY 642

#### **Relational Violence**

An examination of child abuse, battering partners and abuse of the elderly as issues rooted in relationships of one form or another. This course covers classical, modern and post-modern identification, assessment and treatment of relational violence as well as preventive intervention. Addresses relevant cultural and gender issues.

#### PSY 653

#### **Research: Paradigms and Critiques**

An overview of how to read and critically analyze psychological research. Discusses both modern and post-modern paradigms. Techniques of behavioral writing will also be discussed including processnotes, treatment goals and objectives, and other forms of clinical writing

#### **PSY 655**

**Psychopharmacology** An examination of the biological basis of major psychoactive drugs used in the treatment of psychological and behavioral disorders. Special consideration is given to the integration of drugs and psychological therapies, the identification of drug interactions, and empirical evidence regarding the effectiveness of psychotropic drug therapies.

#### **PSY 690**

### Guided Study

(1.5-4.5 quarter units) Individual study under direction of instructor. Requires prior approval of appropriate academic department.

#### SCI – Natural Sciences

#### SCI 100

Survey of Bioscience A survey course of the basic principles of the life sciences. Examines cellular, organismal, population and community biology based on the unifying concept of evolution.

#### SCI 100A

#### Survey of Bioscience Laboratory (1.5 quarter units)

(Prerequisite: SCI 100)

Study of the unifying principles of life with emphasis placed on the following topics: molecular biology of the cell and cellular processes, including energy metabolism, membrane transport and cell division; classical genetics; population genetics; and the mechanism of evolution and the evolutionary basis of species classification. This laboratory course will complement the student's knowledge of biology with demonstrations and experiments. Contact

hours for this laboratory course (45) are based on a 3:1 ratio, i.e. 3 lab hours = 1 lecture hour equivalent.

#### SCI 101

#### Introduction to Chemistry

(Recommended: Prior completion of MTH204 or MTH215 or MTH216A/B)

Fundamentals of inorganic and organic chemistry, including bonding and basic types of reactions. An introduction to nuclear, biological and environmental chemistry. Basic principles and calculations of chemistry with emphasis in the areas of atomic structure, molecular structure and properties, equilibrium, thermodynamics, oxidation-reduction and kinetics.

#### SCI 101A

#### Introduction to Chemistry Laboratory (1.5 quarter units)

(Prerequisites: MTH 204 and SCI 101)

This laboratory course will complement the student's knowledge of chemistry with demonstrations and experiments. Contact hours for this laboratory course (45) are based on a 3:1 ratio, i.e. 3 lab hours = 1 lecture hour equivalent.

#### SCI 102

#### Survey of Physical Science

An introduction to the basic principles and general concepts of the physical sciences. Develops selected topics from chemistry and physics. A general education course for non-technical majors.

#### SCI 103

#### Fundamentals of Geology

Introduction to the major geological processes which create and transform materials and landforms throughout the planet. Geotectonic processes, geomorphology, unifying themes such as plate tectonics, sea form spreading and athenosphere convection cells; and degradation-aggradation processes.

#### SCI 103A

#### Fundamentals of Geology Laboratory

(1.5 quarter units) (Prerequisite: SCI 103)

This laboratory course will complement the student's knowledge of geology with demonstrations and experiments. Contact hours for this laboratory course (45) are based on a 3:1 ratio, i.e. 3 lab hours = 1 lecture hour equivalent.

#### SCI 104

**General Physics** 

(Prerequisite: 2 years of high school algebra and MTH204 or 215 or 216A/B)

Non-calculus based general physics course for earth and life science majors. Study of force, laws of motion, hear, fluid mechanics, electricity, magnetism, light (optics) and modern physics.

#### SCI 104A

#### General Physics Laboratory (1.5 quarter units) (Prerequisite: SCI 104)

Non-calculus based general physics course for earth and life science majors. Laboratory

experiments/exercises, including data analysis on topics, including but not limited to: electricity, magnetism, light (optics) and nuclear physics.

#### SCI 120A

#### Introduction to Chemistry Lab for Engineering Students (1.5 quarter units)

(Prerequisite: SCI 101)

This course is an online format only laboratory class. It is designed to introduce engineering students to the fundamentals and procedures of chemistry laboratory. The course is open only for students in the Master of Science in Environmental Engineering and is not a substitute for the on ground chemistry lab (SCI 101A)

#### SCI 150

#### Introduction to Organic Chemistry

(Prerequisites: SCI 101, 101A)

This course is designed to introduce students to the fundamentals of organic chemistry. This course covers the properties and reactions of hydrocarbons and their functional groups, aromatic compounds, and biological molecules. Special efforts are made in demonstrating the interrelationship between organic chemistry and other areas of science, particularly biological, health, and environmental sciences.

#### SCI 150A

## Introduction to Organic Chemistry Laboratory (1.5 quarter units)

(Prerequisites: SCI 150)

This course is designed to introduce students to the practical aspects of organic chemistry. This course covers basic techniques for handling, analyzing, and identifying organic compounds. In addition, students will learn how to synthesize simple and practical small organic molecules.

#### SCI 201

#### Human Anatomy and Physiology I

(Recommended: prior completion of SCI 100 and 100A, SCI 101 and 101A, or equivalent courses.) This course is concerned with the Anatomy and Physiology of the Human Body. Areas for study include cells and tissues, some of our organs (integumentary, endocrine, cardiovascular, urinary and digestive),) and their functional relation to each other. Topics also include the aging process and diseases in these systems, as well as the effects of genetics, diet, lifestyle, and the environment.

#### SCI 201A

## Human Anatomy and Physiology Laboratory I (1.5 quarter units)

(Prerequisite: SCI 201)

This is a laboratory course in Human Anatomy and Physiology that provides hands-on use of many instruments used in research and medical practices. The amazing progress that Cellular and Molecular Biology have experienced is mainly due to the development of biochemical and biophysical laboratory techniques that have played a central role in our understanding of how things work at the cellular, tissue, and organ level. Through performing a number of different experiments, students will gain a practical understanding and appreciation of the structure and function of the Human Body. Students conduct fetal pig dissections in order to better understand the mammalian anatomy, in particular, the cardiovascular and urogenital systems. Cells, tissues and organs will be compared and contrasted. Digestion, energy requirements, and how enzymes operate will be examined.

#### SCI 202

#### Human Anatomy and Physiology II

(Recommended: prior completion of SCI 201 and 201A, SCI 100 and 100A, SCI 101 and 101A, or equivalent courses.)

This course on Human Anatomy and Physiology focuses on some of our organ systems (skeletal, muscular, nervous, lymphatic, respiratory and reproductive), and their functional relation to each other. Topics also include the aging process and diseases in these systems, as well as the effects of genetics, diet, lifestyle, and the environment.

#### SCI 202A

#### Human Anatomy and Physiology Laboratory II (1.5 quarter units)

(Prerequisite: SCI 202)

This is a laboratory course in Human Anatomy and Physiology that provides hands-on uses of many instruments used in research and medical practices. The course is necessary as evidence in the amazing progress that Cellular and Molecular Biology have experienced is mainly due to the development of biochemical and biophysical laboratory techniques that have played a central role in our understanding

of how things work at the cellular, tissue, and organ level. Through performing a number of different experiments, students will gain a practical understand and appreciation of the structure and function of the Human Body. Students will not dissect in this course, although by examining a live chick embryo students will observe the heart contracting and circulating blood. This course will also focus on mitosis, meiosis, embryonic and fetal development; the practice of aseptic techniques, gram staining and interpreting antibiotic susceptibility tests. Additional investigations include homeostasis in the lungs, liver and kidneys, examinations of bones, brains and chromosomes, and different types of inheritance through the testing of vision, hearing and taste and smell.

#### SCI 203

#### Introduction to Microbiology

(Recommended: prior completion of SCI 201 and 201A, SCI 202 and 202A, SCI 100 and 100A, SCI 101 and 101A, or equivalent courses.) This course will introduce the students to the vast

and unseen world of microorganisms, including both pathogenic and nonpathogenic forms. A basic understanding of the kingdoms of life, cell structure, prokaryotic and eukaryotic cells, cellular metabolism and methods of reproduction is necessary before focusing on the organisms of clinical interest. Topics include: pathogenicity, toxicity and the role of the opportunistic pathogen in humans, including bacteria, fungi, protozoan, viruses, parasites, and prions. The epidemiology of the most common diseasecausing organisms will be compared, with an emphasis on understanding the method of pathogenicity and mode of transmission so as to prevent and control infection. The fundamentals of the immune response to infection will be included, as well as a retrospective on the emergence of HIV and an awareness of newly emerging disease threats such as Ebola and SARS.

#### SCI 203A

## Introduction to Microbiology Laboratory (1.5 quarter units)

#### (Prerequisite: SCI 203)

This course will introduce the students to laboratory safety and procedures for handling biological specimens. The methods of identification of microorganisms, both microscopic and by diagnostic media, will be emphasized. Students will work with a selection of the most common medically significant microorganisms including bacteria, protists, fungi and parasites. This course emphasizes techniques essential to microbiology including aseptic technique, isolation of a single colony by quadrant streak method, preparation of a pure culture, inoculation and interpretation of select diagnostic tests. In addition, preparation of stained slides and wet mounts, microscopic observations, and the determination of antibiotic susceptibility will be learned. Students will culture and study the normal flora of the throat, skin, and surface of everyday items. An introduction to anaerobic bacteria and culturing techniques will be included. Students will gain an understanding of the difference between sterile conditions and disinfection. This two-month course is a combination of lecture and laboratory activities.

#### SCI 219

**Plants and People** A study of food, fiber, forage, fuel and drug crops of major economic significance. Emphasizes ethnobotany, including basic principles of botany, geographic distribution, commercial value and marketable products.

#### SCI 253

#### Environmental Microbiology

(Prerequisites: SCI 100, SCI 100A, SCI 101, SCI 101A or 120A)

The structure, function, and diversity of microbes are explored, including viruses, bacteria, protozoans, algae, and fungi. The growth of microbial cultures, and their control, are studied. Principles of microscopy, identification of microbes, and taxonomy are covered. Principles of toxicology and field sampling for microbes are covered. Concepts in applied and industrial microbiology are included.

#### SCI 253A

#### Environmental Microbiology Lab (1.5 quarter units)

(Prerequisites: SCI 100, SCI 100A, SCI 101, SCI 101A or 120A)

This course teaches laboratory safety and techniques with regard to sampling, handling, and identifying microbes. Students will identify microbes by various methods, including staining. Students will prepare cultures and learn proper transfer and incubation protocols. Aseptic techniques are covered. Selected characteristics of microbes, such as fermentation and culture growth, are studied. Design and performance of environmental sampling protocols are conducted for water, air, and solid matter samples.

#### SCI 300

#### Geography: Mapping the World

A course emphasizing both human cultural and physical geography and the intimate interconnectedness of the physical, biological and human realms on earth. Explains the relationships between the surface features of the earth, climate, plants, animals and human cultures (politics, languages, economic opportunities, urban vs. rural concerns, migrations and other social factors). Focuses on students' immediacy in interacting with the real (measurable and map able) world in which they live.

#### SCI 301

#### Earth and Planetary Sciences

A study of the astronomical, geological and oceanographic sciences. Emphasizes the physical structures and processes that have formed (and are continuing to shape) the stars, planets and other objects of our solar system and the universe.

#### SCI 303

#### Introduction to Geographic Information Systems and Remote Sensing in Natural Resources

This course is designed to demonstrate interdisciplinary features in Geographic Information Systems. It will introduce the students to the fundamental concepts of sound geographic analysis in a GIS. Aspects of the class include geography, cartography, and computer science. These aspects will be incorporated in analytical uses of GIS software for scientific, business, and environmental applications. This will include teaching the student how to input spatial data into the computer, organize the data and perform basic spatial operations. Emphasis will be on natural resource data bases and applications.

#### SCI 322

#### Oceanography

An examination of the interactions between oceanographic, geological and astronomical processes on the physical and living components of the world's oceans. The course explores the interactions between the ocean and the atmosphere and how these interactions affect currents, weather and biological activity. The course curricula also explores how marine biological organisms and biological processes modify the oceanic and global environment.

#### SCI 330

#### Ecology

A study of the relationship of plants and animals to their environment and to one another. Emphasizes populations, the population-community interface and community structure and interactions within the ecosystem.

#### SCI 335

#### **Environmental Science**

A study of man's relationship to the environment and the effects on it. Examines plant and animal community structure, renewable and nonrenewable resources and environmental degradation with

emphasis on what is needed for a sustainable society.

#### SCI 336

#### Natural Resources, Conservation, Economics, and Policy

This course is designed to provide an overview of the distribution and uses of world natural resources and the application of economic concepts to the management of specific renewable resources. Included will be a review of specific resources such as soil, water, grasslands, forests, marine habitats, fish and game populations and energy resources.

#### SCI 337

#### Environmental Law, Policy, and Sustainability

This course is designed to give the student an understanding of the science disciplines which investigates the relationship of laws, national and world policy generation and human society's promotion of a sustainable society.

#### SCI 400

#### **History of Science**

(Prerequisite: One 4.5 quarter unit science course from the natural sciences)

A study of the history of science throughout all human cultures. Emphasizes the mutual interaction between science and society, especially in modern times.

#### SCI 405

### Introduction to Cell and Molecular Biology

(Recommended: prior completion of SCI 100 and 100A, or equivalent)

Introduction to basic biological principles including the chemical basis of life, cell structure and function, energy transformations, cell division, genetics and the origin of life.

#### SCI 405A

#### Introduction to Cell and Molecular Biology Laboratory

(1.5 quarter units)

(Prerequisite: SCI 405) This laboratory course will complement the student's knowledge of cell and molecular biology with demonstrations and experiments. Contact hours for this laboratory course (45) are based on a 3:1 ratio, i.e. 3 lab hours = 1 lecture hour equivalent.

#### SCI 408

#### Introduction to Genetics and Heredity

(Recommended: prior completion of SCI 100 and 100A, or equivalent)

Principles of heredity, with emphasis on the relationship of genetics to the health,

welfare, behavior and society of humankind. Application of genetics to the origin, adaptations and evolution of species.

#### SCI 411

#### Biodiversity

(Recommended: prior completion of SCI 100 and 100A, or equivalent)

A survey of the form and function of diverse life forms (past and present) on earth. Describes representative members of the various kingdoms within the framework of evolutionary ecology and conservation. May also discuss current issues in habitat loss, extinctions, preservation of tropical rain forests and coral reefs, resource values for humans and restoration ecology.

#### SCI 412

#### **General Zoology**

(Recommended: prior completion of SCI 100 and 100A, or equivalent)

A comparative approach to the study of animal life: organization, structure, physiology, reproduction, evolution and behavior of invertebrates and vertebrates.

#### SCI 412A

#### General Zoology Laboratory

(1.5 quarter units)

(Prerequisite: SCI 412)

This laboratory course will complement the student's knowledge of zoology with demonstrations and experiments. Contact hours for this laboratory course (45) are based on a 3:1 ratio, i.e. 3 lab hours = 1 lecture hour equivalent.

#### SCI 420 Animal

#### Animal Behavior

A descriptive introduction to the field of animal behavior. Will emphasize broad-based behavioral concepts that integrate the work of biologists, psychologists and anthropologists.

#### SCI 450

#### Natural History of California: A Field Course

A unique field experience for those students interested in a more comprehensive introduction to the scientific study of the Southwestern ecosystems of the U.S. This course consists of field trips, with sites specifically selected for each academic center within the University.

#### SCI 480

#### **Studies in Field Biology**

A field-based study in paleontology, terrestrial or freshwater ecology, marine biology, deforestation, habitat protection, endangered species, environmental education, or other aspects of field biology under the individual direction of the faculty. Topics and sites are specifically designed for teachers in career development programs or for those students traveling throughout different ecosystems. Flexibility in units and subject matter are at the essence of this course. Units can be taken separately or cumulatively (this course can be repeated depending upon the needs of individual students).

#### SCI 490

## **Guided Study** (1.5-4.5 quarter units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

#### SCI 491A

#### Senior Seminars and Capstone Project in Environmental Studies I

This capstone course provides the student an opportunity to examine environmental issues in a focus area, selected from a menu of eight (8) options. The upper division Seminar options, each structured for seven (7) 4.5 hours sessions will compare and analyze the different approaches modes of inquiry historical perspectives and methodologies associated with each environmental issue/ problem will be reviewed. Having completed the seminars, students will select (with approval of the instructor) a topic within one of the completed options for further research. Students will be expected to conduct original research, producing a "capstone" paper based on a practical "hands-on" project, either field-based or agency-based.

#### SCI 491B

#### Senior Seminars and Capstone Project in Environmental Studies II

This capstone course provides the student an opportunity to examine environmental issues in a focus area, selected from a menu of eight (8) options. The upper division Seminar options, each structured for seven (7) 4.5 hours sessions will compare and analyze the different approaches modes of inquiry historical perspectives and methodologies associated with each environmental issue/ problem will be reviewed. Having completed the seminars, students will select (with approval of the instructor) a topic within one of the completed options for further research. Students will be expected to conduct original research, producing a "capstone" paper based on a practical "hands-on" project, either field-based or agency-based. The seminar topic chosen in SCI491B should be different than the one selected in SCI491A.

#### SCI 492

#### Agency Internship/Project in Environmental Science and Policy

This course gives the student a practical "hands-on" work experience with a private or public environmental agency at regional, state or federal levels. The faculty supervisor at National University will work with agency manager/supervisor and student in designing a specific project or work plan at the agency. A final summative paper is required at the end of the internship.

#### SCL – Supply Chain Logistics

#### SCL 601

#### Supply Chain Management Fundamentals

The supply chain involves the processes between three or more companies to bring product and related information from source of raw supply to the final consumer. In this course, students will be introduced to the difference between logistics and supply chain management, how relationships are built, information technology that will implement the supply chain, and the competitive advantages that can occur. This course will look at the dynamics and conflicting objectives of supply chain partners, and discuss how to integrate these to improve individual company performance and market share.

#### SCL 602

## Supply Chain Management - Strategies, Design and Implementation

This course builds on many critical issues pertinent to Supply Chain Management including inventory management; logistics network design, distribution systems, and customer value, to more advanced discussions of strategic alliances, the value of information in the supply chain, information technology and decisions support systems, and international issues in supply chain management. It also discuss the state-of-the-art models: Managing and Designing the Supply Chain introduces state-of-the-art models, concepts, and solution methods important in the design, control, operation, and management of supply chain systems. A number of case study analyses will be covered to reinforce the concepts.

#### SCL 603

#### eLogistics Management Fundamentals

eLogistics is the process of getting goods and services from the source of supply or origin, to the final consumer. In this course we will look at the complex activities that make up this process, such as transportation, inventory control, warehousing, international logistics, and supply chain management, and how they are inter-related. The course will show how information systems connect all these activities, with the goal of providing the best customer service at the least cost.

#### SCL 604

Advanced Supply Chain eLogistics Management This course covers the advanced concepts in supply Chain Logistics management including Information Networks, Enterprise Resource Planning and Decision Support Systems. This assures that students are fully trained on the uses of these technologies and better prepared to manage these systems upon entering the industry. This course also provides extensive integration of spreadsheet-based solution methods, for example: Use of Excel Solver to solve linear programming problems and reciprocal cost allocation problems, Use of Spreadsheets to perform sensitivity analysis in cost-volume-profit analysis and to prepare process cost reports.

#### SCL 605

#### Technology Assessment and Integration for Supply Chain Management and eLogistics

This course is an in-depth study of information systems technology through systems integration and distributed computing, to maximize efficiencies to meet organizational goals in supply chain management and eLogistics. The course provides a comprehensive, thoroughly up-to-date treatment of IS design, analysis, and implementation, with a practical focus on client server computing and the integration of legacy systems with newer applications to meet changing business needs in supply chain management and eLogistics.

#### SEN – Software Engineering

#### SEN 620

#### **Principles of Software Engineering**

A survey of principles of modern software engineering; development and maintenance of a software product and its supporting documents, software lifecycle and various models of development.

#### SEN 621

#### Software Tools and Processes

Prepares students with the broad understanding of the software design and development tools and processes needed to construct software in a systematic manner. Lab work involves assignments to illustrate these concepts, tools and processes.

#### SEN 625

#### Software Architecture Theory and Practice

Software architecture and its components and relationships, functionality, specifications, properties, interfaces and data models are examined during this course.

#### **SEN 630**

#### **Applied Software Architecture**

An in-depth study of software architecture. Defines and discusses object-oriented programming, design, modeling and programming at an advanced level. Discusses the use of UML to model architectures. Introduces a standard implementation of a distributed, object-oriented middleware (e.g., CORBA, J2EE, Microsoft.NET, etc.). Students design and implement an architecture using software.

#### SEN 635

#### Software Testing Strategies and Metrics

An overview of software testing strategies and software metrics. Develops topics on structured walkthrough, unit, white and black box, integration, system, acceptance and regression testing. Formalizes process for requirements verification and software functional verification and validation. Introduces, examines and surveys advanced concepts of software engineering metrics and models from an application perspective.

#### SEN 640

#### Secure Software Design and Programming

This course explores current techniques for building security into software applications, evaluating software for risks, and researching the latest trends in legal issues surrounding software content and code. Students will complete projects that involve design and programming of secure software.

#### SEN 645

#### Designing Database Applications

This course covers object-oriented modeling and design techniques for database applications. Discusses the benefits attributed to object-oriented techniques versus more traditional relational database systems. The scope and limitations of current database models are researched. Students are required to design and document a prototype database system using object-oriented modeling and relational database techniques.

#### SEN 651

#### User Interfaces and Software Engineering

This course prepares students to develop software user interfaces by providing a background in human computer interaction concepts. Includes procedures that form the basis of effective human computer interactions that meet human cognitive capabilities and organizational practices and processes. Design guidelines, principles and methodologies for constructing, managing, installing and maintaining interactive systems that optimize user productivity are explored. Students will also complete a project related interface requirements specification.

#### SEN 655

#### Application Software Development for the Web A survey of the technologies required for software development of current applications, such as internet and client/server. The Internet and the Web have revolutionized the way people communicate and organizations do business. This course will introduce students to the establishment, configuration and maintenance of intranet and internet website. Software development in this area includes network programming, remote method invocations, serverside and client-side programming, multi-threading, advanced GUI application development and on-line database processing.

#### SEN 660

#### Software Quality Engineering

(Prerequisite: all software engineering core courses) Emphasizes quality engineering approaches for software project management, planning, estimating, design, development and distribution. Understanding of Capacity Maturity Models, ISO 9001 and IEEE 12207 Standards is also emphasized. Based on their operational concepts document, students develop a well-defined software plan.

#### SEN 686A

#### **Software Engineering Project I** (*Prerequisite: SEN 660*)

Study of the software lifecycle. Emphasizes software development and testing, logical organization of software project, appropriate documentation and development and completion of the SRS and SDD. Grading is H, S, or U only.

#### SEN 686B

#### Software Engineering Project II

(Prerequisite: SEN 686Å) Two-month course, meets once a week.

Continuation of SEN 686A with development and completion of a software user's manual and software test plan. Students implement and present their completed projects. Grading is H, S, or U only.

#### SMG – Sports Management

#### SMG 430

#### Introduction to Sports Management

The foundation and orientation course for the Sports Management Concentration this course is a survey of the principles of management applied to the administration of sports enterprises: planning, controlling, organizing, staffing and directing of the various activities necessary for effective functioning. Examples of such activities include: golf course management, tennis club management, fitness center management, tournament management, etc.

#### SMG 432

#### **Principles of Leisure Services Management**

This course examines the organization and administration of the leisure service field, ranging from notfor- profit entities such as parks and libraries to businesses such as hotels, restaurants, amusement parks and country clubs. Students analyze operating problems and propose solutions to enhance their knowledge and outlook on leisure facilities and operational management.

#### SMG 433 Sports Financial Management

An examination of the basic financial and accounting problems facing the operation of a sports enterprise, the course concentrates on the unique characteristics of sports organizations and programs, and provides the student with the skills necessary to effectively manage values, resources, and revenue streams. Students will develop skill in financial analysis and an appreciation of the financial decision-making process in the administration of sports enterprises.

#### SMG 434

#### Principles and Problems of Coaching

The study of vital sociopsychological aspects of coaching, the primary focus of this course is on individual sports – golf, tennis, fitness, but also includes team sports – football, soccer, basketball, etc. Includes philosophy of coaching, sports administration, psychology of sport, physiology, and ethics. Emphasis is given to the technical, tactical, physical, and psychological components of players and coachiplayer relationships.

#### SMG 435

#### Legal Aspects of Sports Administration

This course covers federal, state and organizational regulations impacting the sports industry. Focus is placed on contract law, tort liability, agency law, labor law, copyright, license and intellectual property law as applied to sports. The legal relationship of athletes as individuals and as members of a team to sports industry management will be discussed. General legal aspects of E.E.O., affirmative action and diversity in the workforce effecting employees of the sports enterprise will also be covered.

#### SMG 436

#### Sports Marketing and Promotions

This course introduces students to the principles of sports marketing and the application of these principles to sports related organizations. The primary focus is on planning, with additional emphasis on promotions management.

#### SOC – Sociology

#### SOC 100

#### Principles of Sociology +

(Prerequisites: ENG 100/101)

A critical introduction to the basic concepts in sociology and a basic examination of major theoretical perspectives including functionalism, symbolic interactionism and conflict theory. Students learn how to formulate research topics in sociology and evaluate various research methodologies. Topics for exploration include education, religion, race relations, gender identity, the social construction of the family, deviance and social problems.

#### SOC 260

#### Cultural Anthropology

(Prerequisites: ENG 100/101)

An introduction to the principles and processes of anthropology and culture. This course offers a mix of theoretical approaches that include evolutionism, historical particularism, diffusionism, functionalism and French structuralism, as well as methods of fieldwork and ethnography. Students explore the impact of culture on human behavior, the interrelationships among different parts of a culture and the adaptive quality of cultural systems.

#### SOC 310

#### Cultural Dynamics in the Workplace (Prerequisites: ENG 100/101)

As the workplace changes under the impact of new technologies and alterations in the compositions of the workforce, we need to rethink the nature of cultural dynamics. This course not only seeks to define the relationship of the workplace to the community, but also examines the historical development and contemporary relevance of social, artistic and eco-

nomic matters crucial to a healthy perspective for employers and employees.

#### SOC 325

#### **Contemporary Popular Culture**

(Prerequisites: ENG 100/101) The course introduces students to the crucial debates in the field of cultural sociology, including a critique of the distinction between 'high' and 'low' forms of culture; the social distinction between work and leisure time; the impact of globalism and 'Americanization;' the role of the electronic media and technology in our lives; the influence of society on individual patterns of consumption, indebtedness, and personal taste; and the sociology of everyday life. In the course, we will discuss such topics as leisure, the mass media, advertising, 'infotainment,' tv programming, films, celebrity, fads, sports, fashion, youth culture, music, talk shows, tabloids, Internet chat rooms, simulated realities, home shopping, cell phones, video gaming, and controlling images of class, age, gender, sexual orientation, ethnic identity, and race. Students have the opportunity to incorporate their own popular cultural preferences as topics for papers, journal assignments, and discussion postings and responses.

#### SOC 327

Arabic Culture

(Prerequisites: ENG 100/101)

This course will introduce the students to the major aspects of Arab culture, civilization, and history from pre-Islamic times to the present. Social composition of the Arab world and the issue of national identity will be stressed. The transformation of Arabic society will be considered in this course.

#### SOC 328

#### Intercultural Thinking and Creativity (Prerequisites: ENG 100/101)

An expansive overview of world consciousness, drawing upon the significant, creative contributions of men and women from varied cultures and different fields of learning. Emphasizes the approach of comparative synthesis. Studies the world's outstanding creative thinkers and the interconnectedness of their works.

#### SOC 331

#### Sociology of Health and Illness

(Prerequisites: SOC 100 and ENG 100/101) Employs "the sociological imagination" to explore issues of health, illness and medical practice. It examines the social contexts of physical and mental health, illness and medical care and gives prominence to the debates and contrasting perspectives which characterize the field of medical sociology. Exploring the social, environmental, and occupational factors in health and disease, the development of health professions and the health care workforce, doctor patient relationships, the structure and processes of health care organizations, health care and social change, it is designed for students interested in the organization and analysis of health care in in the U.S.

#### SOC 336

#### American Film and Society +

(Prerequisites: ENG 100/101)

A critical examination of the complex relationship between film and society and the processes by which film both influences and is influenced by society. Emphasizes the importance of locating the meaning of film texts within social and historical perspective and identifies how the film industry influences the presentation of different groups of people and issues in society. Explores the interrelationship between film and technology, the impact of narrative and the institution of Hollywood on the sociological imagination and the nature of representation, particularly as it applies to race, class and gender.

#### SOC 338 Chinese Film and Television

(Prerequisites: ENG 100/101) This course will briefly introduce students to the history of film in China prior to 1949, with a focus on the Shanghai scene, while the bulk of the course will concentrate on the development of film in the People's Republic of China since that time. Attention also to will be given to influences of pre-1949 film and Hong Kong and Taiwan film and TV on the development of post-1976 cinematography and television in China, detailing the move away from political propaganda-based film and TV and the increasing importance of market-driven (both domestic and international) entertainment values.

#### SOC 344

#### Marriage, Sex and the Family (Prerequisites: ENG 100/101)

Over the past 30 years, ideas about marriage, sex and the family seemingly have changed. But have they? Using a sociological perspective, this course examines the institution of marriage and identifies family structures through an overview of the current topics affecting family life and a discussion of sex, marriage and family in historical and cross-cultural context. Covers topics including kinship ties, the sexual revolution, changing gender roles, remaining childless, alternative forms of family, divorce, family violence, the economy and the family and an aging population.

#### SOC 352

#### Modern Chinese Culture (Prerequisites: English 100/101)

This course will introduce the students to the major aspects of modern Chinese culture since 1949. The changing social composition and the development of a modern popular culture since 1976 will be closely examined, as will the transformation of Chinese society from Maoist conformity to the cultural pluralism of today, as well as the new social problems these changes have brought.

#### SOC 362

**Persian Culture** (*Prerequisites: ENG100/101*)

This course will introduce the students to the major aspects of Persian culture, civilization, and history from pre-Islamic times to the present. Social composition of the Persian speaking nations and the issue of national identity will be stressed. The transformation of Persian society will be considered in this course.

#### SOC 365

Classical Social Theory (Prerequisites: SOC 100 and ILR 260)

(Prerequisites: SOC 100 thm IER 200) Beginning with the Enlightenment and extending into the 20th century, this course examines the foundational theories that have engaged major social theorists. It analyzes the nature and types of classical social theory; it explores the historical, economic, political, intellectual, and biographical contexts within which they developed; and it appraises the extent to which they continue to inform current sociological research and thinking and the ways in which they differ.

#### SOC 375

#### Contemporary Social Theory

(Prerequisites: SOC 100 and ENG 100/101) Examines the major social theories that have engaged social theorists from the mid-twentieth century onward. The course also investigates the historical, sociological, intellectual, and biographical contexts within which contemporary social theories have developed and the extent to which they inform current sociological research and thinking.

#### SOC 385

#### Methods of Social Inquiry

(*Prerequisite: SOC 100, MTH 210, and ENG 100/101*) Designed to present students with the key methods of sociological research. Research methodologies guide the defining, collecting, organizing, and interpretation of data. We will systematically study major sociological research designs and methods including survey, qualitative technique, secondary data analysis, network analysis, and experiment. All methods have strengths and weaknesses and we will explore the kinds of conclusions that can be drawn from each method. Finally, students will develop the critical ability to understand the problems faced by contemporary researchers and how they dealt with (but not necessarily solved) these problems.

#### SOC 423

Iranian Cinema (Prerequisite: ENG 100/101)

This course is an introduction to contemporary Iranian cinema. A variety of films from different genres will be presented and discussed. Attention will be given to the social, intellectual, and political contexts from which these works have originated.

#### SOC 430

#### **Culture, Technology and Society** (*Prerequisites: ENG 100/101*)

A survey of the social, cultural and historical development of technology. Examines the creation and social impact of such technological innovations as the printing press, the telegraph, the telephone, railroads, steam engines, internal combustion engines, automobiles, earthmoving equipment, radio, television, computers, nuclear power, satellite communications, facsimile machines, cellular phones, fiber optics and the Internet, among others. Emphasizes the effect of technological changes on work, education, consumption, politics, the environment and especially the effect of technology on race, class and gender.

#### SOC 443

#### Sociology of Deviance

(Prerequisites: SOC 100 and ENG 100/101) Employs a critical sociological approach to deviance and social control in contemporary society. The topics to be considered include: the origins and functions of deviance in society; the institutional production and categorization of deviance; the impact of deviance on personal and social identity; deviant careers; and deviance and social change. We will consider several major theoretical perspectives on deviance within sociology, we will make use of current data on crime and current research in sociological and criminological journals and web sites, and we will examine portrayals of deviance and social control in literature, film and popular culture.

#### SOC 445

#### **Contemporary Social Problems** (*Prerequisites: ENG 100/101*)

A critical examination of historical and contemporary social conditions. Using various sociological perspectives, namely functionalism, conflict theory and an interactionist perspective, students explore the ways in which social problems are defined, learn how to evaluate policies designed to alleviate social problems and analyze the unintended consequences of social policies when issues of race, class, gender and other differences are not adequately taken into consideration.

#### SOC 449

#### Sociology of Law

(Prerequisites: SOC 100 and ENG 100/101) Explores the social, political, and economic foundations of law, the study of punishment and criminality, formal systems of social control and their legitimacy in law, and the relationship of political agendas to victimization, human rights, and legalized oppression. Emphasis will be on explanations of social order, legal definitions of appropriate and inappropriate behaviors, the history of law, the political uses and structure of the law, criminal justice system components, and critical sociopolitical analyses of law. The impact of the legal system on society

and the individual will also be explored. Assignments and readings are designed to connect historical understandings with present day knowledge about law.

#### SOC 455

**Organizational Sociology** (*Prerequisites: SOC 100 and ENG 100/101*) A course about organizations and their behavior. The study of social structure is central to sociology and the study of formal organizations is fundamental to the study of contemporary society. Much of our educational and working lives are spent within and passing between organizations. This course foregrounds the key issues in the sociology of organizations. The focus of the course is the major theoretical approaches and debates in organizational theory, an interdisciplinary field that is primarily grounded in sociology but that also has roots and practitioners in economics, political science, and management studies

#### SOC 460

#### The Individual and Society

(Prerequisites: SOC 100 and ENG 100/101) About social interaction, that is, the behavior and cognitive processes which occur when people inter-act in groups. We will consider the individual as a social actor and the development of a person's selfimage or identity as well as the social influences on individual behavior, including the process of social-ization. Students will engage in detailed analysis of social interaction and explore the processes which occur in groups, including conformity, productivity and leadership. Finally, the course considers the links between the individual and society and phenomena such as status attainment, social influences on health, and deviant behavior. Central to each of these processes are the unique qualities of human communication via the medium of language and the social construction of meaning.

#### SOC 490

**Guided Study** (1.5-4.5 quarter units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

#### SOC 499

#### Sociological Research Seminar (Capstone Seminar)

(Prerequisites: SOC 100 and ENG 240 or equivalent) The capstone seminar is taken near the end of the student's degree program after completion of the 40.5 units of core required courses for the major, and after completion of six or more of the elective courses.

The objective of the capstone course is to produce a paper or creative project that is exemplified by extensive research, critical thought, and intellectual engagement. The project should excite students and deepen their sociological understanding. As a "senior project," it will require students to identify a research or creative project, develop a research ques tion, choose an appropriate method for studying the problem and adopt a theoretical perspective to explain the issue. Grading is H, S, or U only.

#### SOC 500

#### Understanding Cultural Pluralism in American Society +

(Prerequisite: ENG 100/101)

An analysis of the emergence of cultural pluralism in American society and the valuing of diversity as a socio-cultural imperative. Explores historical and cross-cultural perspectives on the issues of race, ethnicity, gender, migration and community development. Also examines the implications of the demographics in the United States and the concepts of inclusiveness and cross-cultural competencies needed to understand diversity in a global context.

#### SOC 540 Power and Social Change

#### (Prerequisites: ENG 100/101)

A critical examination of theories of power, including the relationship of power to culture, social class, the economic order, government, ideology, poverty, race, sex and other topics. Studies community, national and international power structures and institutional leaderships.

#### SOC 604 **Culture and Socialization** (Prerequisites: ENG 100/101)

An in-depth examination of the concepts of culture and socialization, this course analyzes the socialization process as the key means through which culture is reproduced. Through a critical engagement with competing theories of socialization, students undertake advanced research projects, oral presentations and written assignments. Lecture and discussion topics include issues of ethnic identity and cultural diversity, socio-economic, gender and racial stratification, media representations, dress, language and religion and schooling and the reproduction of inequality. Issues are explored from a cross-cultural perspective.

#### SSE – Safety and Security Engineering

#### SSE 602

#### Design and Evaluation of a Modern Safety Program

This course provides a comprehensive coverage of occupational safety and health field including concepts such as: technological changes that have introduced new hazards in the workplace; proliferation of health and safety legislation and corresponding regulations; health care and workers' compensation costs; a growing interest in ethics and corporate responsibility; professionalization of health and safety occupations; increased pressure from labor organizations and employees in general to increase work place safety; rapidly mounting costs associated with product safety and other types of litigation: and increasing incidents of workplace violence. This course introduces the engineering concepts through case study analysis and provides hands on experience in developing a modern safety program.

#### SSE 603

#### Introduction to Security Engineering

This course introduces to security and loss prevention as well as an overview of the security field including risk assessment, physical security, personnel security and information security areas. It provides students with a solid introduction to security principles and focuses on security concepts and management in a post-9/11 world including expanded coverage of terrorism and homeland security. It introduces students to the new concerns and challenges facing contemporary security managers and describes and discusses threats and prevention strategies to more than 20 specific security applications in real world examples.

#### SSE 604

#### Security Engineering - Planning and Design (Prerequisite: SSE 603)

This course provides a comprehensive coverage of security planning in both new and existing facilities. This course offers real-world concepts, principles, and processes for building security and safety design-including assessing a client's needs and working with physical security consultants •Specific areas will include: Security Design Concepts

- Security Evaluation and Planning
- Building Hardening
- Security Technology
- ·Biochemical and Radiological Protection
- Security and Emergency Operations
- Putting Security into Practice

#### SSE 605 **Chemical Process Safety Engineering** (Prerequisite: SSE 602)

This course covers chemical process safety and provides an overview of safety evaluation of a chemical and mechanical engineering plants. This course emphasis on fundamentals is intended to help both the student and the practicing scientist to under-stand the safety concepts and to apply them in an appropriate manner. This course introduces concepts such as process hazards checklists, hazards surveys, hazards and operability studies and risk assessment techniques using probability theory, event trees, and fault trees.

#### SSE 606

#### Managing Information Security

This course introduces the computer security issue for every type of system, from traditional centralized systems to distributed networks and the Internet. The students will be taught on the state-of-the-art in networking; cryptography; program and operating system security; administration; legal, privacy, and ethical issues, and much more. This course combines core computer science concepts related to operating systems, networks, data bases, and programming, with accessible discussions of the use of cryptography and protocols. This course demonstrates each important area from a developer's or user's point of view, lays out the security vulnerabilities and threats, and follows countermeasures to address them

#### SSE 607

#### Fire and Explosion Engineering

Introduction to fire science; fire prevention, containment and extinguishment; methods of assessment of fire risks; hydrocarbon fires and explosions; methods of estimating explosion overpressures; dynamic response of structures to sudden overpressures; explosion detection, control and mitigation techniques; active and passive fire protection systems; escape routes; legal requirements.

#### SSE 608

#### Science of Explosives and Biological Threat Materials

(Prerequisite: SSE 603)

This course introduces to forensic detection of explosives, the detection of hidden explosives in airfreight, luggage, vehicles, and on suspects. The course also covers biological threat materials and their assessment and control. In addition, this course covers the environmental detection of explosives, detecting on-site explosives in soil and water of contaminated areas and the detection of landmines. Specific topics to be covered include the following:

•Classifications of explosives

- Explanations of the basic terms related to the detection of explosives
- Vapor detection methods
- Probing radiation methods
- Tagging of explosives
- •Systems integration and performance testing
- •Detection of explosives in contaminated areas
- Detection of landmines
- ·Biological threat materials, assessment and control

#### **SSE 609**

#### Planning and Response for Terrorism

This course introduces the comprehensive and integrated principles behind chemical, biological, radiological, and cyber-terrorism and explosives and the appropriate response procedures for each of these terrorism and tactical violence incidents. This course also covers Incident Management System and a Quick Reference Guide for Hazard Zones, Incident Threat Response, SBCCOM Guidelines, and NIOSH Interim Recommendations.

#### **SSE 610A**

Safety and Security Engineering Capstone Course (Completion of all SSE courses in the core requirements)

This project course focuses on the application of safety and security engineering methods and processes learned through this program. The students are to select research topics under the guidance of instructor and conduct research and write a detailed report. Working in teams or as individuals under the guidance of their assigned faculty advisor, students clarify research topics and identify sources from which data is gathered in preparation for the project. Students then gather data and present their research in both written and oral form to the client organization, if applicable, and to other students and faculty. The duration of this course is one month.

#### **SSE 610B**

#### Safety and Security Engineering Capstone Course (Prerequisite: SSE 610A)

This is a continuation of SSE 610A project course focuses on the application of safety and security engineering methods and processes learned through this program. The students are to select research topics under the guidance of instructor and conduct research and write a detailed report. Working in teams or as individuals under the guidance of their assigned faculty advisor, students clarify research topics and identify sources from which data is gathered in preparation for the project. Students then gather data and present their research in both written and oral form to the client organization, if applicable, and to other students and faculty. Twomonth course, meets once a week.

#### SSE 611

#### **Emergency Management**

The course details the Federal Emergency Management Agency (FEMA) (U.S), the Federal Response Plan (FRP), and the roles, responsibilities, and interrelationship between FEMA and state and local emergency management systems. It also covers the changes in emergency management since the events of September 11, 2001.

#### SSE 612

#### **Disaster Management and Preparedness**

This course offers training on disaster response and management in the face of natural and manmade catastrophe. The course provides training on methodological approaches to be adopted during a disaster. Specific topics covered include risks identification, Governmental regulations, structural pre-paredness, coordinating with local assets, preplanning for a disaster, effective communications, select-ing the right people and training for success.

#### SYE – Systems Engineering

#### **SYE 600**

#### Introduction to Systems Engineering and the Systems Design Process

This is an introductory course which provides a detailed overview of systems, systems engineering, and systems design. The student will learn about the nature of systems, both natural and manmade, and the engineering process of human-made systems. The main emphasis is on systems design and the four phase design process: conceptual design, pre-liminary design, detail design, and evaluation and testing. Other important systems concepts such as life cycle engineering and feasibility and requirements analysis are introduced.

#### **SYE 601**

#### Systems Analysis and Design Evaluation (Prerequisite: SYE 600)

This course provides an in depth study of system analysis and design evaluation. The emphasis is on using various modeling tools to predict system performance and evaluate various system alternatives under multiple design criteria and conditions of risk and uncertainty. Use of calculus and MS Excel are required.

#### SYE 602 Advanced System Design (Prerequisite: SYE 601)

This course provides advanced system design concepts and details the methodologies of design for operational feasibility: system reliability, maintainability, usability (human factors), supportability (serviceability), producibility and disposability, and affordability (life-cycle costing). The course also provides an introduction to systems engineering management, including planning, organization, and program control and evaluation.

#### SYE 603

#### System Dynamics

(Prerequisite: SYE 602)

This course presents the ideas of complex systems, system behavior, and system of systems. It includes the concept of intended and unintended consequences, systems thinking, modeling dynamic systems and decision making, system instability and oscillation, and testing of system models. System dynamic programming software is provided with the text. Students must have access to computer hardware that meets National University SOET standards to run the software.

#### TED – Teacher Education

#### **TED 300**

Fundamentals of Education (Prerequisite: Admission to the Teacher Education program, ENG 100/101, TED 320)

An examination of the role and nature of schools in the United States through an exploration of a range of cultural, philosophical, historical, legal, political and ethical perspectives.

#### **TED 310**

**Development and Learning** (Prerequisites: Admission to the Teacher Education Program, ENG 100/101, TED 320) This course focuses on the cognitive, social, and emotional development of children from both theoretical and practical perspectives. Special emphasis will be placed on individual differences, social contexts, and cultural influences. In addition, this course introduces learning theory and practice, identify quality learning environments, and address issues of student achievement and motivation

#### TED 320

#### Introduction to Teaching as a Profession (1.5 quarter units)

This course introduces teacher candidates to teaching as a profession as well as the process and procedures for creating a professional electronic portfolio. Candidates will be introduced to the professional teaching standards; the role of teachers within schools, the community, society, and in the world; and an understanding of the commitment, rewards, and responsibilities of a teaching career. The e-portfolio assesses the teaching carden region of the porter of the porter of the teacher candidate's development as a professional educaotro throughout their course-work and student teaching. Teacher candidates will complete their professional electronic portfolio in TED470. Requires 30 hours of field experiences in schools to expose the candidate to a wide variety of issues in the world of teaching and education and to have the opportunity to study students, classrooms, and schools as the foundation for becoming a teacher. Offered over a 2 month format and must be completed prior to enrollment in other TED coursework.

#### TED 330A

#### Reading And Language Arts Methods-Elementary

(Prerequisites: Admission to the Teacher Education Program, ENG 100/101, TED 320, TED 300 and TED 310)

This course includes content, methods and materials for teaching reading in an integrated elementary classroom. Candidates will learn strategies for management of activities/materials, planning lessons,

using technology, evaluating learning, and integrating reading into other content areas. Student Teaching Candidates are required to complete five hours of observing and assisting in a public school classroom as directed by the instructor.

#### **TED 330B**

#### Reading/Language Arts Methods-Secondary

(Prerequisites: Admission to the Teacher Education Program, ENG 100/101, TED 320, TED 300 and TED 310

Course Description: This course includes content, methods and materials for teaching reading in a secondary classroom. Candidates will learn strategies for management of activities/materials, planning lessons, using technology, evaluating learning, and integrating reading into other content areas. Student Teaching Candidates are required to complete five hours of observing and assisting in a public school classroom as directed by the instructor

#### TED 340

#### Reading In The Content Area

(Prerequisites: Admission to the Teacher Education Program, ENG 100/101, TED 320, TED 300 and TED 310)

This course includes content, methods and materials for teaching reading in a secondary classroom. Candidates will learn strategies for management of activities/materials, planning lessons, using technol-ogy, evaluating learning, and integrating reading into other content areas. Student Teaching Candidates are required to complete five hours of observing and assisting in a public school classroom as directed by the instructor.

#### TED 350

#### Math And Science Methods

(Prerequisites: ENG 100/101, TED 320)

Course includes content, methods and materials for teaching mathematics and science in an integrated elementary classroom. Candidates will learn classroom management of activities/materials, planning lessons, using technology, evaluating learning, and integrating mathematics into other content areas. Student Teaching Candidates are required to complete five hours of observing and assisting in an elementary classroom as directed by the instructor.

#### TED 355

#### History And Social Science Methods

(Prerequisites: Admissions to the Program, ENG 100/101, TED 320, TED 300 and TED 310) Course includes content, methods and materials for teaching history-social science in the elementary classroom. Candidates will learn classroom manage ment of activities/materials, planning lessons, using technology, evaluating learning, and integrating history and social science into other content areas. Student Teaching Candidates are required to complete five hours of observing and assisting in a classroom as directed by the instructor.

#### TED 380

#### Visual / Performing Arts And Physical Education Methods

(Prerequisites: Admission to the Teacher Education Program, ENG 100/101, TED320, TED 300 and TED 310)

This course is designed for elementary teacher education candidates to gain knowledge of visual and performing arts and physical education and how classroom teachers can incorporate these disciplines into the elementary classroom.

#### TED 410

#### Multicultural Literature

(Prerequisites: ENG 100/101, TED 320) A survey of children's literature. Designed for K-12 teacher candidates to gain knowledge of the wide range of genres of multicultural literature, strategies for teaching literature, and ways in integrate literature instruction across the curriculum. Course emphasizes criteria for evaluating and selecting

quality literature that reflects the interests and reading levels for diverse student populations and for the goals of the curriculum. Candidates will learn effective strategies for implementing a literature based approach to reading, for fostering reading for enjoyment and comprehension.

#### TED 420

### Diversity In Teaching And Learning

(Prerequisites: ENG 100/101, TED 320) This course emphasizes the development of competencies that would meet the various needs of diverse learners in varying learning communities. An emphasis is placed on the following: parity of treatment of pupils who differ in race, class, exceptionality, ethnicity, culture, gender, and religion; accurately presenting information and reports related to diverse learners; and encouraging teacher candidates to take leadership roles in shaping learning communities that demonstrate the acceptance of diverse learners. Student Teaching Candidates are required to complete five hours of observing and assisting within diverse classrooms in a public school classroom as directed by the instructor.

#### **TED 430**

## Instructional Strategies For Students With Special Needs

(Prerequisites: ENG 100/101, TED 320)

Identifying the obstacles and barriers that obstruct high quality teaching, and developing strategies for accommodation and adapting content, assessment, and pedagogy toward a proactive agenda that ensures every student with exceptional learning needs is taught under optimal conditions for learning.

#### **TED 440**

#### **Classroom Leadership And /Assessment Seminar** (*Prerequisites: Admission to the Teacher Education program, ENG 100/101, TED 320*)

Candidates will explore, develop, and test effective classroom leadership strategies which will create a classroom environment that is conducive to learning and teaching. This course is also designed to teach candidates how to determine a student's level of performance on a specific task or at the conclusion of a unit of teaching and learning. Interpretation of data and reporting will be discussed. Parent conference strategies which significantly enhance classroom teaching and learning will be examined.

#### TED 465A

#### Student Teaching I

(Prerequisites: Completion of all upper division course requirements, including all TED coursework) This course provides candidates with opportunities to apply the theoretical concepts and instructional skills addressed Content and Performance Standards for the teaching profession. Candidates who meet the requirements to student teach are assigned to an elementary classroom in an accredited school for six weeks of supervised fieldwork that includes a formal process for determining the readiness of each student teacher for advancement to daily responsibility for whole-class instruction during TED 465B: Student Teaching II. During their student teaching, candidates are mentored by a National University supervisor and a site supervisor. Candidates are required to enroll in TED 470 Practicum and Assessment, which is offered concurrently with student teaching.

Note: Multiple subject candidates must have experience student teaching in a K-2 and a 3-5/6 classroom. Multiple subject candidates may complete either grade level requirement in the first or second or third phase of their Student Teaching I, II, or III. Grading is H, S, or U only.

#### TED 465B

#### Student Teaching II

Prerequisites: Completion of all upper-division course requirements, including all TED coursework) This course provides candidates with opportunities to apply the theoretical concepts and instructional skills addressed in Content and Performance Standards for the teaching profession. Candidates who have successfully completed Student Teaching I are assigned to a classroom for the second phase of their student teaching for eight weeks of supervised fieldwork that includes a formal process for determining the readiness of each student teacher for advancement to daily responsibility. During their student teaching, candidates are mentored by a National University supervisor and a site supervisor. Candidates are required to attend the Student Teaching Seminar (TED 460), which is offered concurrently with student teaching. Note: Multiple subject candidates must have experiones student teaching in a K 2 and a 2 5 (6 class

ence student teaching in a K-2 and a 3-5/6 classroom. Candidates may complete either grade level requirement in the first or second phase of their Student Teaching I or II. Grading is H, S, or U only.

#### TED 465C Student Teaching III

Prerequisites: Completion of all upper division course requirements, including all TED coursework) This course provides candidates with opportunities to apply the theoretical concepts and instructional skills addressed in Content and Performance Standards for the teaching profession. Candidates who have successfully completed Student Teaching II are assigned to a classroom for the third phase of their student teaching for four weeks of supervised fieldwork that includes a formal process for determining the readiness of each student teacher for advancement to daily responsibility. During their student teaching, candidates are mentored by a National University supervisor and a site supervisor. Candidates are required to attend the TED 470 ePortfolio Practicum and Assessment which if offered concurrently with student teaching. Note: Multiple subject candidates must have experience student teaching in a K-2 and a 3-5/6 class room. Candidates may complete either grade level requirement in the first or second phase of their Student Teaching I or II. Grading is H, S, or U only.

#### TED 465D

#### Student Teaching IV Prerequisites: Completion of all upper-division course requirements, including all TED coursework) This course provides candidates with opportunities to apply the theoretical concepts and instructional skills addressed in Content and Performance Standards for the teaching profession. Candidates who have successfully completed Student Teaching II I are assigned to a classroom for the fourth phase of their student teaching for four weeks of supervised fieldwork that includes a formal process for determining the readiness of each student teacher for advancement to daily responsibility. During their student teaching, candidates are mentored by a National University supervisor and a site supervisor. Grading is H, S, or U only.

#### TED 470

## Student Teaching Seminar And E-Portfolio (3 quarter units)

(Prerequisites: Completion of all course requirements and Admission to Student Teaching, this course must be taken concurrently with TED 465A-D)

The Student Teaching Seminar is designed to assess teacher candidates' development as professional educators. Teacher candidates will be guided through their student teaching seminar to demonstrate their professional education competency by successfully completing a Professional Electronic Portfolio. The E-Portfolio is aligned with the six Teaching Performance Expectation Domains cited in the Student Teaching Handbook. The Student Teaching Seminar Syllabus is designed for either an online or face-to-face (on-site) delivery mode. The online Threaded Discussion Topics and Assignments can be adapted for small or large group discussions within a face-to-face (on-site) classroom setting. When the delivery mode for this course is online, students must upload their artifacts/reflections in two places: 1) the Seminar Course electronic dropbox and 2) the E-Portfolio (foliotex). Grading is S or U only.

#### **TED 605**

#### The Diverse Classroom

This course presents the complexity of today's classroom through cultural diversity, student development, curriculum planning, including curriculum development, design, implementation and evaluation.

#### TED 610

#### Best Internship Practices

(Prerequisite: Admission to the Intern Program) Designed to orient Interns to the program. Schedules will be developed for observation and assessment of instruction. Creating and maintaining effective environments for student learning will be the major curricular focus. Interns will be assessing their own classroom environments and creating more effective possibilities. Emergency or survival pedagogical skills will be covered as Interns bring to class concerns from their developing learning environments.

#### TED 611

#### **Educational Psychology**

TED 611 examines how educational psychology is applied to learning and teaching. Learning theories, instructional approaches, learning environments and student assessment are studied.

#### TED 615

#### The Foundations of Education

This course is the first course in the Teacher Preparation Program. The role and nature of schooling is explored through a range of philosophical, historical, legal and political perspectives within the context of the United States and Californian society and schooling.

#### TED 616A

## Curriculum and Instruction I: History and Social Science

Candidates learn the long and short planning using the K-12 curriculum standards in History and Social Studies. Understanding of teaching practices: lesson design, learning environments and assessment of student learning are emphasized to provide access to the curriculum for all students. Long and short planning using K-12 curriculum standards in history and social science, understanding lessons design, assessment, and instructional strategies with a focus on making curriculum and modifications for all students.

#### TED 616B

## Curriculum and Instruction II: Mathematics and Science

Focus on elementary level curriculum development and teaching mathematics and science using state content standards. Content specific teaching practices, lesson design, and assessment of student learning are emphasized to provide access to the curriculum for all students. Designed to teach long and short planning using the K-12 curriculum standards in math and science. Understand lesson design, assessment, and instructional strategies with a focus on making curriculum and modifications for all students.

#### **TED 616C**

### Curriculum and Instruction III: Visual and

Performing Arts, Health, and Physical Education Long and short planning using the K-12 curriculum standards in visual and performing arts, health, and physical education. Understanding of teaching practices; lesson design, learning environments and the assessment of student learning are emphasized to provide access to the curriculum for all students. Students will demonstrate an understanding of lesson design, assessment, and Instructional strategies with a focus on making curriculum and modifications for all students.

#### TED 621A Language Development Methods for the Elementary School

(Prerequisites: TED 615, BTE students only: BTE 612) This course is designed for multiple-subject credential candidates and focuses on current theories and research in language structure and use and in language learning, particularly those in the first and second language development. Social, cultural, political, legal, psychological, general pedagogic and specific methodological factors affecting the first and second language development are considered. Application of these theories, strategies and techniques of second language learning across content areas in diverse educational environment in elementary school is addressed.

#### TED 621B

#### Reading and Language Arts Methods for Elementary Schools

(Prerequisites: TED 615 and TED 621A) This course provides Multiple Subject Candidates with research-based methods and strategies for designing and implementing a balanced and comprehensive program of systematic instruction in reading, writing and related language arts aligned with the state adopted English Language Arts Academic Content Standards for Students and the Reading/Language Arts Framework. Course content is organized into four Reading Instruction Competence Assessment (RICA) domains.

#### TED 622A

#### Curriculum and Instruction I: History, Social Science, Physical Education, Visual and Performing Arts

(Prerequisite: TED 615 and TED 621A) This course focuses on multiple subject curriculum development and teaching History, Social Science, Physical Education, Visual and Performing Arts using State of California content standards. Contentspecific teaching practices, lesson design, learning environments and assessment of student learning are emphasized to provide access to the curriculum for all students.

#### TED 622B

#### Curriculum and Instruction II: Mathematics and Science

(Prerequisites: TED 615 and TED 621A)

This course focuses on multiple subject curriculum development and teaching math and science using State of California content standards. Content-specific teaching practices, lesson design and assessment of student learning are emphasized to provide access to the curriculum for all students.

#### **TED 623**

#### Language Development Methods for Secondary and Middle Schools

(Prerequisite: TED 615)

This course is designed for single-subject credential candidates and focuses on current theories and research in language structure and use and in language learning, particularly those in the first and second language development. Social, cultural, political, legal, psychological, general pedagogic and specific methodological factors affecting the first and second language development are considered. Application of these theories, strategies and techniques of second language learning across content areas in diverse educational environment in elementary school is addressed.

#### TED 624

## Content Area Literacy for Secondary and Middle Schools

(Prerequisites: TED 615 and TED 623) This is course is aligned with the California Board of Education adopted academic content standards in English Language Arts and the Reading/Language Arts Framework for students who are speakers of English, English language learners (ELLs) and students with special needs and is designed to assist Single Subject Credential Candidates in developing the background and skills necessary to teach literacy in the content areas to middle/junior and/or senior high school students in the culturally and linguistically diverse classrooms in the California public schools.

#### TED 625A

## Curriculum Development for Secondary and Middle Schools

(Prerequisites: TED 615 and TED 623) This course integrates the California K-12 academic content standards with effective curriculum development principles for diverse learners. Through guided field activities, teacher candidates will access student background information for the purpose of designing and reflecting upon long and short term planning that enables engaged student learning and provides access to the curriculum for all learners.

#### TED 625B

#### Instruction and Classroom Management for Secondary and Middle Schools

(Prerequisites: TED 615, TED 623 and TED 625A) This course builds on the curricular principles established in TED 625A by incorporating within a welldesigned lesson plan, instructional strategies and related classroom management principles. The class also provides strategies for dealing with unproductive student behavior.

#### TED 628I

#### Internship Clinical Practice

This course is designed to assess, support, coach, and evaluate a National University teacher intern in their understanding, design and implementation of teaching practices in the context of their classroom. Interns will receive ongoing support provided by a National University Support Provider (NUSP) and a Site Support Provider (SSP) during an eight-month period of clinical practice. Interns will be responsible for meeting competency in the California Teacher Performance Expectations (TPEs) as evidenced by their assessed satisfactory performance in the classroom.

#### TED 629

### Student Teaching Seminar (3 quarter units)

This course integrates theory and practical approaches to situations experienced by candidates during their Student Teaching experience. Content areas include: (1) School Culture and Classroom Learning Environment, (2) Classroom Management, (3) Lesson Design, Implementation and Reflection and (4) Legal and Ethical Issues Related to the Teaching Profession. Grading is H, S, or U only.

#### TED 629I

#### Intern Teaching Seminar (3 quarter units)

(Prerequisite: Admission to the Intern Program) This course is designed to develop the assessment program for Interns. Interns will be developing assessment portfolios. Objectives will be set for the program; activities will be designed to meet the objectives; assessment tasks will be planned to evaluate the meeting of the objectives; and documentation of the process will be collected and organized. The documentation will be organized and presented at the close of the seminar. Grading is S or U only.

#### TED 630A

#### **Beginning Student Teaching**

(Note: This course does not grant graduate level credit)

TED 630A comprises the first month of the full-day, full-time, semester-long Student Teaching experience, in which candidates are placed with certified field supervisors. Candidates must successfully complete four components in their supervised Beginning Student Teaching: (1) school-site and classroom orientation including school personnel interviews, (2) onsite classroom observations, (3) lesson plan design, implementation and reflection within the context of fulfilling (4) professional responsibilities. Candidates also attend TED 629 Student Teaching Seminar, which integrates theory and practical approaches to situations experienced by candidates during TED 630A. Grading is H, S, or U only.

#### TED 630B, TED 630C, TED 630D Student Teaching

(Prerequisite: TED 630A) (Note: This course does not grant graduate level

credit) Student Teaching TED 630B, C, D comprises the second, third and fourth months of the full-day, fulltime semester-long Student Teaching experience. Candidates are placed with certified teacher supervisors and are required to successfully complete four components: (1) Classroom responsibilities, (2) lesson plan design and presentation and (3) off-site classroom observations, each component within the context of fulfilling (4) professional responsibilities. Multiple-subject candidates spend eight weeks in both a K-2 and a 3-6 classroom (non-traditional programs may vary). One of the two assignments is with a certified Field Supervisor. Single-subject candidates experience teaching a minimum of four academic periods a day in two grade levels; a minimum of three of four periods must be in their designated academic area. Ĉandidates complete TED 629 Student Teaching Seminar (as begun in TED 630A), which integrates theory and practical approaches to real-life situations experienced by candidates during TED 630 B, C, D. Grading is H, S, or U only.

#### TED 638

#### Spanish for the Mathematics and Science Classroom

Development of relevant Spanish vocabulary, comprehension and speaking skills to effectively support student learning in Mathematics and Science. Learning through the use of instructional scaffolds, teachers incorporate the strategies into their teaching repertoire and enhance their sensitivity to second language learners. Not recommended for BTE students.

#### TED 639

#### Spanish for the Humanities Classroom

Development of relevant Spanish vocabulary, comprehension and speaking skills to effectively support student learning in the Humanities. Learning through the use of instructional scaffolds, teachers incorporate the strategies into their teaching repertoire and enhance their sensitivity to second language learners. Not recommended for BTE students.

#### TED 640A

## **Student Teaching I** (6 quarter units)

Focuses upon the practice and development of teaching skills in the classroom in a full day, eightweek term at a school site. Elementary education candidates meet the requirements of the Teacher Performance Expectations and are mentored by a university supervisor and a master teacher at the school site. Students attend the seminar coincidentally with the student teaching experience. Grading is H, S, or U only.

#### TED 640B

## **Student Teaching II** (6 quarter units)

A continuance of TED 640A, and as such, continues to focus upon the practice and development of teaching skills in the classroom in a full day, eightweek term at a school site. Elementary education candidates continue to meet the requirements of the Teacher Performance Expectations as they are mentored by a university supervisor and a master teacher at the school site. Students continue to attend the seminar coincidentally with the student teaching experience. Grading is H, S, or U only.

#### TED 649

#### Classroom Management and the Student Teaching Seminar

Focuses upon the merger of coursework knowledge and teaching practice. The student teaching seminar addresses that merger as it relates to the management of a classroom and the development of appropriate student behavior. Classroom rules and rewards and consequences are developed and practiced. Conflict resolution skills are taught and practiced. Problems and issues that are met within the student teaching experience are brought to the seminar, discussed, and solutions are practiced. Assessment of teaching development in the entire program and during student teaching are assessed through the completion of the e-portfolio. Grading is H, S, or U only.

#### TED 655

#### Assessment in the Middle School Classroom

A comprehensive approach to assessment practices that foster cohesiveness in classroom management while being grounded in middle-level philosophy, curriculum and instruction. Includes a knowledge of appropriate student outcomes as correlated to adolescent development; exploration of state curricular documents and other professional associations in education; development of plans to ensure educational equity and implementation in curriculum content and educational practices; examinations of the roles of historical, legal, social, political, economic and multicultural/multilingual perspectives on assessment; and examination of different learning style in a performance-based, authentic assessment curriculum.

#### TED 656

## Contemporary Trends and Models in Middle School Education

Offers an examination of contemporary schooling policies and teaching practices in relationship to the most current issues, theories and research in education. A major focus of the class shall consider the historical and philosophical mission and development of middle level education. Also offers a diversity of institutional approaches in order to reach learners from diverse cultural backgrounds with various learning styles.

#### TED 657

#### Psychology and the Middle School

Focuses on curriculum-based advisement for the middle school student. University students learn how common traits and individual differences that characterize multiple intelligence in children and adolescents affect individual development. Students also study how economic and gender issues can impact the development of adolescent self-esteem and self-efficacy. A strong discussion of conflict resolution in middle school is also considered. This course shall also offer a diversity of instructional approaches in order to reach learners from diverse cultural backgrounds with various learning styles.

#### TED 658

#### Leadership and the Middle School

Promotes principles of leadership that focus on stakeholder cohesiveness within the middle school and the planning of curriculum and instruction based on knowledge of appropriate student outcomes. A clear understanding of early adolescent development as it relates to state curricular and other professional association objectives is one significant outcome of this course. Educational equity for people of all cultures and the implementation of such curriculum content and educational practices shall be demonstrated while the roles of historical, legal, social, political, economic and multicultural/multilingual perspectives are consid-

multicultural/multilingual perspectives are considered in depth.

#### TED 660

#### The Bilingual Bi-Cognitive Child

A survey of research, theory and practices related to

the learning and development of the bilingual child. Applies theories on culture, cognition, bilingualism, biculturation and psychological dynamics of a positive self-esteem and academic development.

#### TED 661

#### Socio-linguistics

An examination of the development of language within a socio-cultural context. Studies the significant role of language in culture transmission and social/political control. Emphasizes the role of codemixing and code-switching as a communication system in a multilingual, multicultural society.

#### TED 662

#### **Comparative Linguistics**

An analysis of the structure, phonology and morphology of language. Compares and contrasts the structure of different languages and addresses the linguistic problems in the transfer of errors from L1 to L2. Emphasizes the strategies for teaching English Language Development.

#### TED 665

#### Cognition, Language and Culture

Research, theory and practices related to the learning and development of the bilingual bi-cognitive child. Explores theories of cultures, cognition, bilingualism, acculturation and psychological dynamics of a positive self-esteem and academic development.

#### TED 666

#### The Cultural Foundations of Linguistics

Focuses on the development of language within the social, cultural and psychological context of language learning. Looks at the roles of language in cultural transmission and social/political control, the role of code-mixing and switching as a communication system in a multilingual, multicultural society and the role of the teacher in the delivery of instruction to second-language learners.

#### TED 667

#### Diversity and Change: A Critical Pedagogy

Designed to communicate the dynamics and challenges of educating our ever-increasing diverse population. Leads educators to explore and exchange ideas of what is important in the lives of students and teachers, the school community and society in the move toward transformative education. Provides students the opportunity to develop ideas, define concepts and expand thinking in the broad social, historical, cultural and political context of teaching and learning.

#### TED 668

#### Survey of Children's Multicultural Literature

A survey of children's multicultural literature, emphasizing effective strategies for fostering understanding of cultural diversity, tolerance, and prejudice reduction, social justice. Encourages development of critical skills in assessing literature

#### THR – Theater

#### THR 200

#### Theater Arts

An examination of theater as a dramatic medium capable of expressing every sort of human conflict, emotion and aspiration. Deals with tragedy, comedy, satire, historical plays, musicals, theatre of the absurd and improvisational techniques. Also introduces ways to implement popular and successful performance and improvisational exercises in the elementary/secondary classroom.

## TMG – Technology Management

#### Data Mining Tools: Managing Technology for Competitive Advantage

Conceptual foundations of issues and principles that

underpin data-mining technologies critical to the business success. Several data-mining software products are discussed and sample studies are provided for specific industries.

#### TMG 603

#### Information Security Risk Analysis

An analysis of vulnerabilities and threats facing organization's information and systems. Provides an in-depth discussion of the cost-effective risk analysis techniques such as PARA (Practical Applications of Risk Analysis) and FRAP (Facilitated Risk Analysis Process).

#### TMG 605

#### Ethics and Technology Leadership

This course focuses on ethical leadership concepts in the field of technology and addresses the versatile ethical dilemmas that are impacting the networked world. Students will be provided the most up-todate and thought-provoking insights as a vehicle to understand the rapidly expanding challenge of ethics in cyberspace. In today's organizations leaders must exhibit personal courage with a clear conviction of values (Drucker, 1996) as they implement those policies that apply ethical leadership, along with legal, cultural, human resources, and business values within organizational structures. Through lectures, readings, case study analysis and team projects the students will be exposed to the role of a leader as an IT professional. Teleology and deontology as methods of leadership are explained to insure the student grasps the concepts of ethics in the environment and the need to insure integrity is congruent with leadership.

#### TMG 607

**Managing Technology Acquisition and Resources** This course provides students with skills and knowledge to acquire technology systems and the management of their life cycle. Students will learn a structured approach for technology acquisition, vendor selections and negotiation with all the project stakeholders. Students learn the step-by-step practice of vendors' selection to find a suitable vendor's system at the right price. This course covers the dynamics of how to initiate, create, plan and organize the systems acquisition process. Students will learn to create a Request for Proposal (RFP) and how to review the proposals, and monitor the selection processing the best technology initiative in support of the organizations continuous improvements. The students will explore technology obsolescence and human aspects of technology transition, including the key concepts of change management, communication, and managing resistance as it affects the organization.

#### TMG 610

Global Trends in Technology Transfer/Application This course focuses on our current technology trends that support the global economy. Students will gain understanding of the factors that drive this ever changing technological environment and why it is so important to transfer and apply the cost effective technological solution to their own organization. The economic, political and technological processes that impact our global organizations must be understood. Therefore, students will examine transnational corporations and organizations that are engaged in this dynamic technological environment. The problems, issues, and solutions must be analyzed by students because we live in a diverse cultural economy with global technological applications requirements.

#### TMG 615

Workflow Technologies and Process Improvement The focus of this course is on the process of redesigning existing business processes for the enterprise. With the introduction of techniques for identifying, modeling, and redesigning a functional and streamlined workflow for the enterprise, which works as an alliance to achieve competitive advantage in the marketplace. Students' will learn how to identify, design and apply workflow technologies as individuals and through a team experience. In this course students will also explore methods of business reengineering that optimize production through ERP and CRM technologies.

#### TMG 620

#### **Principles of Technology Management**

This course provides an in-depth analysis allowing students to apply the key concepts in technology management and the role of technology managers in both private- and public- sector organizations. It provides an understanding of how organizational entities can be structured and managed to respond effectively to dynamic changes caused by technology and international competition.

#### TMG 625

#### Systems Analysis and Design

Students apply the fundamentals of systems analysis and design. The purpose is to provide an understanding of the systems view of a product, service, or process to include a generic representation of its elements, security, and dynamics. The skills, tools and methodologies needed to quantitatively analyze and optimize systems, and to make decisions as technology managers are provided.

#### TMG 635

## Strategic Management of Technology and Innovation

Students apply strategic analysis techniques to business policy and organizational development. Emphasis is placed on linking technology policy with corporate strategy and the identification of technology options appropriate for the business or organizational strategy being executed.

#### TMG 640

#### Managing Technology Change

This course provides students with skills and knowledge that will help them introduce new technology or continuous improvement initiatives smoothly and effectively. During this course, students learn a structured approach for dealing with the organizational and human aspects of technology transition, including the key concepts of change management, communication, and managing resistance.

#### TMG 650 A

#### Final Master Project I

(Prerequisites: Completion of at least 27 quarter units of core courses)

The student produces an original research project (applied research). The topics are initiated by the student and include emerging trends and important areas of interest in technology issues. Each project should provide incentive and value to an organization or a community. It is suggested that the student research non-profit organizations, under funded schools or charities of choice. The project requires approval from an advisory committee. Grading is H, S, or U only.

#### TMG 650 B

#### Final Master Project II

The focus will be on the full development of the proposed Final Project Management Document deliverable from TMG 650. Students develop their tasks and implement the project as it has been proposed in the project planning. The final product will be presented for approval to the advisory committee before final submittal to the Executive Approval Panel of faculty and business associates. Students meet once a week for 8 weeks to complete their projects. Grading is H, S, or U only. Course is eligible for an In Progress (IP) grade.

#### WCM – Wireless Communications

#### WCM 301 Linear Systems and Signals (Prerequisites: CSC209 and SCI104)

Course focuses on mathematical models of continuous-time and discrete-time signals and linear systems and includes time-domain and frequency domain concepts, Fourier series and Fourier transform, basic filtering concepts, the Laplace transform, and applications to communication systems.

#### WCM 302

#### **Probability and Random Processes in Engineering** (*Prerequisites: CSC209 and SCI104*)

Introduction to the concepts of probability, random variables, functions of random variables, random sequences and random processes, and elements of estimation theory.

#### WCM 601

#### Analog and Digital Communications Fundamentals

(Prerequisites: WCM 301and WCM 302 or Passing Grade in Wireless Communications Foundations Examination)

Course focuses on basic analog and digital principles and their application to the analysis and design of real-world communication systems.

#### WCM 602

Wireless Communications: Principles and Practice (Prerequisites: : WCM 301 and WCM 302 or Passing Grade in Wireless Communications Foundations Examination and WCM 601)

This course covers the topics in wireless communication systems, analysis of modern wireless communication system infrastructures, the cellular concept and system design fundamentals, mobile radio propagation, multiple access techniques for wireless communications, wireless networking.

#### WCM 603

#### Wireless Networking: Architectures, Protocols and Standards

#### (Prerequisite: WCM 602)

This course addresses the important issues of wireless networking, including architectures, protocols and standards. It describes concepts, technology and applications of wireless networking as used in current and next generation wireless networks. It also considers the engineering aspects of network functions and designs, mobility management, wireless enterprise networks, GSM, network signaling, WAP, mobile IP and 3G systems.

#### WCM 604 Coding an

#### Coding and Modulation for Wireless Communications

(Prerequisite: WCM 603)

This course describes the coding and modulation techniques, and comparative studies of different coding and decoding schemes including Trellis and Turbo coding. Studies of different modulation formats and their effects on wireless channels, analysis of different modulation schemes applied to the current wireless standards.

#### WCM 605 Information, Privacy and Security in Wireless Systems

#### (Prerequisite: WCM 604)

Analysis of the security and privacy issues associated with wireless systems. Cost/risk trade-offs. Technical, physical, and administrative methods of providing security. Control of access through technical and physical means. Identification and authentication. Encryption, including the Data Encryption Standard (DES) and public key systems. Management of encryption systems, including key protection and distribution. Discussion of practices and case studies related to the ethical aspects in the telecommunication industries.

#### WCM 606

#### **CDMA: Wireless Standards and Applications** (*Prerequisite: WCM 604*)

Analysis of CDMA (code division multiple access) concepts, models and techniques. An overview of

#### second- and third-generation (3G) air interfaces. Direct-sequence spread spectrum (DSSS); physical and logical channels; CDMA IS-95 call processing, diversity, combining and antennas; access and paging channel capacity; planning of a CDMA system.

#### WCM 607

#### Third- and Fourth-Generation (3G and 4G) Wireless Networks

(Prerequisites: WCM 604)

Evolution of Time Division Multiple Access (TDMA)-based 2G cellular systems to 3G systems. Evolution of 3G systems to all-Internet Protocol (IP) based 4G systems; Universal Mobile Telecommunications System (UMTS) architecture including W-CDMA air interface. High Speed Downlink Packet Access (HSDPA) technologies and uplink technologies including Orthogonal Frequency Division Multiplexing (OFDM) and Orthogonal Frequency and Code Division Multiplexing (OFCDM) for high-speed cellular wireless data. Wireless Local Area Network technologies, including 802.11, 802.16 (WiMax) alternative to cellular, and beyond. Bluetooth, RFID and emerging Near Field Communications (NFC) technologies.

#### WCM 608

#### Engineering Software for Wireless System Development

(Prerequisite: WCM 604)

Hands-on strategic analysis tools designed to help planners, engineers, and technologists rapidly, but thoroughly, develop wireless, wired, and broadband network and service plans including detailed technical and business analysis.

#### WCM 609

## Communication Systems Modeling with Wireless Applications

(Prerequisite: WCM 604)

Course focuses on simulation models built with MATLAB programming software that can serve as virtual laboratories for predicting the impact of system design changes for advanced digital communication systems.

#### WCM 611A

#### Master's Research Project I

(Prerequisites: Completion of a minimum of eight out of ten courses, WCM 601 through WCM 609, WCM 612) This course is the first part of the Master's Research project. Students will learn the fundamentals of engineering project management and tools, in particular, Microsoft Project. There will be an emphasis on project/team management techniques and hands-on training in using MS Project to manage various tasks in the Master's Research Project. As students master project management fundamentals, the focus will turn to research and selection of an appropriate topic in the field of wireless communication systems. Student project teams will research potential topics for their project and complete a project proposal with timelines for project completion. Upon approval, students will set up Microsoft Project to manage completion of the project. Grading is H, S, or U only.

#### WCM 611B

#### Master's Research Project II (Prerequisite: WCM 611A) Two-month course, meets once a week.

A continuation of WCM 611A. Students complete the project including all required documentation and formally present their final product to a review panel for evaluation. Grading is H, S, or U only.

#### WCM 612

#### **Current Topics in Wireless Economics**

(Prerequisites: WCM 601 through WCM 609 or approval of Lead Faculty)

This course will teach students how to evaluate the impact of continually advancing wireless technologies on the varied perspectives of competitors and consumers. Students will study these impacts from

## Course Descriptions

the perspectives of wireless service providers, wireless equipment providers, wireless application providers, and consumers. Different business models employed by the various industry segments will be studied to gain insight into the interplay between business models and advances in technology. Finally, the course will study the impact of global competitive pressures and both national and international regulatory bodies on technology choices.

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