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Addendum to the GENERAL CATALOG

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8410 Addendum 73A



National University System Administration

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National University System Affiliates

National University John F. Kennedy University Division of Pre-College Programs National University Academy National University Virtual High School National Polytechnic College of Science National University International Spectrum Pacific Learning Company LLC WestMed College

"^d 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.

Addendum 73A to Catalog 73

Academic Policies and Procedures

English Language Proficiency for Online International Students

Online International students from a country where English is not the primary language will be required to fulfill the University's English Language Proficiency requirement prior to beginning their degree program. Further information on the English Language Proficiency requirement can be found in the University catalog on page 28.

Transition Program Information

Transition programs are degree programs noted in the catalog where an undergraduate student in an approved transition program who meets certain requirements (length of time remaining in UGRD degree as well as GPA minimum) may enroll in and take up to 3 graduate level courses to be used as upper division electives in his/her Bachelor's program. As a result, when the student finishes the Bachelor's degree and enrolls in the graduate transition program, the student will have those classes completed and waived in their Graduate program; and will not need to replace units.

The following rules apply:

- A student may enroll in an Undergraduate to Graduate transition program when they are within six classes of completion of the Undergraduate program.
- The required Undergraduate cumulative GPA is a 3.00 minimum.
- Students must enroll in and take the first class in the Graduate program within six months after conferral date of the Undergraduate degree.
- Students must complete the Graduate program within four years with no break in enrollment of 12 months or more.
- Only classes that are identified as transition program eligible may be taken and the student must meet all prerequisite requirements for the graduate level class.
- The courses taken while part of an Undergraduate career do not transfer as graduate level classes either at National University or at any other university.
- A student must obtain a grade of B or better in a transition class in order for it to be eligible for both a waiver of content and units in the Graduate program.
- A transition course in which a student earns a grade of B-, C+, or C will qualify for a *waiver* only of the content in the Graduate program but the student must take another graduate level approved elective to replace the graduate level units. The Graduate level unit requirement will not be lowered for grades of B- or below.
- If a student gets a grade of C-, D+, D, D-, or F neither a waiver of content or units will be granted. The student must retake the course within the Graduate program and obtain a better grade. The original grade will remain part of the Undergraduate record as it is considered to be part of an awarded degree and as such the GPA is not subject to alteration at any time.

Transition Programs

College of Letters and Sciences (COLS)

- Bachelor of Public Administration to Master of Public Administration
- BS in Criminal Justice to Master of Criminal Justice
- BS in Criminal Justice to Master of Forensic Sciences
- BS in Criminal Justice to Master of Public Administration

School of Business and Management (SOBM)

- BA in Management to MA in Management
- Bachelor of Business Administration to Master of Business Administration
- BS in Accountancy to Master of Business Administration

School of Engineering and Technology (SOET)

- BS in Computer Science to Master of Science in Computer Science
- BS in Information Systems to Master of Science in Information Systems
- BS in Information Technology Management to Master of Science in Engineering Management with specialization in Technology Management

College of Letters and Sciences

Faculty Update

Chandrika M. Kelso Associate Professor San Diego Main Campus J.D. Osmania University Phone: (858) 642-8433 E-mail: ckelso@nu.edu

New or Modified Courses

CJA 337 (replaces 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.

Course Terminations

LIT 300	Comparative Methodologies
LIT 499	Comparative Lit Capstone

Program Terminations

Bachelor of Arts in Comparative Literature

School of Business and Management

Program Terminations

- Bachelor of Arts in Marketing
- Master of Business Administration program Area of Specialization in Electronic Business
- Master of Science in Knowledge Management
- Master of Science in Corporate and International Finance

(New)

MAESTRÍA GLOBAL EN ADMINISTRACIÓN DE NEGOCIOS (GLOBAL MBA) EN ESPAÑOL (NUEVO)

(729)

Asesor Académico: Dr. Ramón Corona • (858) 642-8427 • rcorona@nu.edu

La Maestría en Administración de Negocios es un programa que proporciona a los estudiantes adultos las teorías y habilidades necesarias para la toma de decisiones y negociaciones a nivel ejecutivo. La orientación de este programa es multidisciplinaria, incluyendo un análisis económico, político y cultural en la planeación estratégica, y el desarrollo de negocios nacionales e internacionales. Asimismo, se enfatiza la aplicación de principios éticos en las organizaciones.

El programa consiste en una serie de cursos que componen los diversos aspectos de un negocio en el ámbito global, tanto a nivel operativo, como conceptual y de liderazgo, y está diseñado para el 1

ejecutivo (gerente o director) de una empresa pequeña, mediana o global, que busca aprender conceptos de administración, mercadotecnia, finanzas, liderazgo, etc., con un enfoque de aplicación inmediata en su organización. Asimismo, este programa es ideal para ejecutivos experimentados que buscan actualizar sus conocimientos y habilidades en áreas como mercadotecnia global o vía Internet (e-marketing), finanzas internacionales, etc., a fin de garantizar su competencia en el mercado.

Objetivos del Programa

- Integrar conceptos y teorías de Mercadotecnia, Liderazgo, Economía, Finanzas y Administración a la solución de problemas y aprovechar oportunidades de negocios.
- Evaluar y analizar las situaciones de negocios en un contexto global para desarrollar estrategias y planes adecuados.
- Comparar el uso de las habilidades de Liderazgo y Negociaciones en un entorno global.
- Diseñar y administrar alianzas y socios internacionales
- Analizar estados financieros y tomar decisiones financieras y contables bien informadas y adecuadas.
- Formular decisiones de negocios éticas y apoyar un ambiente de negocios justo e incluyente.

Prerrequisitos para ingresar al programa

Haber completado un programa de pregrado (licenciatura), y obtenido el título, en una universidad debidamente acreditada. El departamento escolar de National University (Office of the Registrar) analizará la documentación proporcionada y determinará la validez de los estudios del solicitante, y autorizará o no, su ingreso al programa.

Asimismo, el estudiante deberá comprobar su nivel de dominio del idioma español, ya sea que haya estudiado su pregrado (Licenciatura) en un país donde el idioma oficial sea el español y que los cursos los haya estudiado en español, o mediante la autorización del asesor académico del programa después de una entrevista con el estudiante.

Requisitos para el grado

11 cursos; 49.5 unidades cuatrimestrales

A fin de recibir el grado de Global MBA en Español, el estudiante debe completar por lo menos 49.5 unidades de trabajo de posgrado. Un total de 9 unidades de posgrado pueden ser revalidadas por un trabajo de posgrado equivalente en otra institución acreditada, y se aplicaría a este programa siempre y cuando no se hayan utilizado en la obtención de otro grado académico. Los estudiantes se deberán referir a la sección de requisitos de admisión para la solicitud y evaluación.

Cursos obligatorios

GMB 689S	Liderazgo y Negociaciones
GMB 620S	Negocios Electrónicos
GMB 601S	Estadísticas para Negocios
GMB 631S	Mercadotecnia Global
GMB 673S	Alianzas Estratégicas Globales
GMB 682S	Contabilidad Gerencial
GMB 672S	Administ. del Riesgo Global
GMB 683S	Administ. Financiera Global
GMB 674S	Estrategias Compet. Globales
GMB 602S	Administración Estratégica
	Prerrequisito: Curso que culmina la parte académica para los
	estudiantes del MBA. A fin de inscribirse en GMB 602S, los
	estudiantes deben haber completado al menos 30 unidades
	cuatrimestrales de los cursos requeridos del MBA,
	exceptuando el GMB 696S.
GMB 696S	Provecto MBA
	Prerrequisito: haber completado todos los cursos
	fundamentales
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(New) ■ GLOBAL MASTER IN BUSINESS ADMINISTRATION (MBA) IN SPANISH

Faculty Advisor: Dr. Ramon Corona • (858) 642-8427 • rcorona@nu.edu

Offered online and conducted entirely in Spanish language, the Global MBA in Spanish program provides adult 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.

The program consists of a series of courses covering the various business components in a global environment, both at an operational level, as well as conceptual and leadership, and it is geared towards the business executive (Manager or Director) of a small, medium or large global company who needs to learn key concepts and applications in the fields of Management, Marketing, Finance, Leadership, etc. focusing in an immediate application in his/her work or business. Furthermore, this program is ideal for experienced executives who need to update their knowledge and skills in fields such as Global Marketing, E-Marketing, Global Finance, and the like, so they remain competitive in the marketplace.

Program Learning Outcomes

- Integrate Marketing, Leadership, Economics, Finance and Management concepts and theories to solving business problems and taking advantage of Business opportunities
- Evaluate and analyze business situations in a global setting to develop appropriate strategies and plans
- Judge leadership and negotiation skills in a changing Global environment
- Design and manage international partnerships and alliances
- Analyze financial statements and make informed financial and accounting decisions
- Formulate ethical business decisions and support a fair and engaging business environment

Program Requirements

To have completed a Bachelor's degree (including certificate or título) from an accredited institution. The Office of the Registrar will analyze the documentation provided and determine eligibility to the degree as well as the validation of the student's academic background.

The applicant must also demonstrate proficiency in the Spanish language such as required for a graduate program, either by having taken the courses of the Bachelor's program in Spanish language or by approval of the faculty advisor after a telephone or CLP interview with the student.

Degree Requirements

In order to obtain the Global MBA in Spanish degree, students must complete at least 49.5 quarter units of graduate work. A maximum of nine (9) graduate units can be transferred from an accredited institution and used for credits in this program provided that the units have not been used to satisfy the requirements of an awarded degree. Students should refer to the admission requirements section for the application and evaluation details.

Degree Requirements

(11 courses; 49.5 quarter units)

Core Requirements

GMB 689S Leadership and Negotiations GMB 620S Electronic Business GMB 601S Statistics for Business GMB 631S Global Marketing Global Strategic Alliances GMB 673S GMB 682S Managerial Accounting Global Risk Management GMB 672S GMB 683S **Global Financial Management Global Competitive Strategies** GMB 674S GMB 602S Strategic Decision Making (A capstone course for MBA students. To enroll in GMB 602S, MBA students must first complete at least 30 quarter units of the MBA program requirements, other than GMB 696S.) GMB 696S MBA Project (Prerequisites: Must have completed all core classes.

New Course Descriptions (Spanish) Global Master of Business Administration (GMBA)

GMB 689S: Liderazgo y Negociaciones (Leadership and Negotiations)

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.

GMB 620S: Negocios Electrónicos (Electronic Business)

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 relevantes de negocios vía Internet.

GMB 601S: Estadísticas para Negocios (Statistics for Business)

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.

GMB 6315: Mercadotecnia Global (Global Marketing)

Un estudio de planificación y organización estratégicas para la mercadotecnia internacional al investigar los mercados globales, realizar mercadotecnia de productos de consumo, productos industriales y servicios en el mercado mundial. Investiga el esfuerzo de publicidad y promoción internacionales, la venta personal y la administración de personal, la fijación de precios, el sistema de distribución, la mecánica y logística del comercio de exportación, los requerimientos financieros para la mercadotecnia internacional y la coordinación y control de las operaciones globales. También trata acerca del efecto de los convenios comerciales sobre los negocios internacionales.

GMB 673S: Alianzas Estratégicas Globales (Global Strategic Alliances)

Este curso utiliza teorías económicas y estratégicas para analizar el comportamiento competitivo de las organizaciones. Se pretende que el estudiante sea capaz de evaluar las decisiones estratégicas tomadas por las organizaciones en el ambiente competitivo dinámico del comercio internacional. El curso examina los impactos que las decisiones comerciales tienen en la supervivencia y rentabilidad de una organización. El ambiente competitivo se analiza en términos de factores culturales, económicos, sociales, político-legales y tecnológicos.

GMB 682S: Contabilidad Gerencial (Managerial Accounting)

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.

GMB 672S: Administración del Riesgo Global (Global Risk Management)

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.

GMB 683S: Administración Financiera Global (Global Financial Management)

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.

GMB 674S: Estrategias Competitivas Globales (Global Competitive Strategies)

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 globales. El curso examina también el impacto de las opciones de negocios en la supervivencia y rentabilidad de una organización, mediante la toma de decisiones utilizando programas de simulación o equivalentes. El entorno competitivo es analizado en función de los factores culturales, económicos, sociales, legales, políticos y tecnológicos.

GMB 602S: Administración Estratégica (Strategic Decision-Making)

Prerrequisito: Curso que culmina la parte académica para los estudiantes del MBA. A fin de inscribirse en GMB 602S, los estudiantes deben haber completado al menos 30 unidades cuatrimestrales de los cursos requeridos del MBA, exceptuando el GMB 696S.

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.

GMB 696S: Proyecto MBA

Prerrequisito: haber completado todos los cursos 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, desarrollan y presentan su investigación en forma escrita a la organización-cliente (cuando aplique), y al instructor para ser evaluada.

New Course Descriptions (English) Global Master of Business Administration (GMBA)

GMB 689S: Leadership and Negotiations

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.

GMB 620S: 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.

GMB 601S: Statistics for Business

An examination of the increasing complexity of business problemsolving 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.

GMB 631S: Global Marketing

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.

GMB 673S: Global 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 is discussed in order to maximize the efficient and effective allocation of resources in pursuit of competitive advantage.

GMB 682S: Managerial Accounting

The 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.

GMB 672S: Global 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.

GMB 683S: Global Financial Management

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.

GMB 674S: 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.

GMB 602S: Strategic Decision-Making

(A capstone course for MBA students. To enroll in GMB 602S, MBA students must first complete at least 30 quarter units of the MBA program requirements, other than GMB 696S.)

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 sociocultural, 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 WTO upon the strategic management of business enterprises. Explores global business opportunities provided through new technologies for both small firms and large corporations.

GMB 696S: MBA Project

(*Prerequisites: Must have completed all core classes.*)

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 by H, S, or U only. This course is two months in length.

School of Education

Faculty Update

Mary Anne Weegar Assistant Professor San Diego Main Campus Ed.D., Education Nova Southeastern University Phone: (858) 642-8360 E-mail: mweegar@nu.edu

The following statement applies to the Master of Arts in Teaching Area of Specialization in Autism (found on page 179 in the 2010 University Catalog #73) as well as the Certificate in Autism (found on page 231 in the 2010 University Catalog #73):

The Autism Certificate Program meets the requirements for the new CTC Added Authorization for Autism Spectrum Disorder (ASD.)

Notice of Change in Student Teaching Requirements

Effective March 1, 2010 all single/multiple subject credential candidates are required to pass TPA Tasks 1 & 2 prior to beginning student teaching.

School of Engineering and Technology

Faculty Update

Bachelor of Science in Information Systems Faculty Advisor: Patrick Olson Phone: (408) 236-1152 E-mail: polson@nu.edu Fax: (408) 236-1195

Internship Information for School of Engineering and Technology Students

With approval of Lead Faculty any student may earn up to 10 percent of their grade in the sequence of the last two courses through an internship or curricular practical training with a company or organization.

Students studying on student or other visas must follow all rules and regulations of their status.

Revised Course Descriptions

SEM 601: Introduction to Sustainability

An introduction to sustainability concepts. An interdisciplinary approach is used by combining environmental, economic, and social dimensions of sustainable development by looking into relevant local, regional, and global environmental issues. Various sustainable forces that may impact an organizational operation will be discussed.

SEM 602: Enterprise Excellence

(Prerequisite: CSC 220 or equivalent)

Overview of statistical tools needed to measure business improvement related to sustainability. Step-by-step guide to develop and institute metrics for sustainability improvement will be provided. enterprise excellence including process improvement analysis and management systems for business, industry, academic, government and military organizations will be covered.

SEM 603: Sustainable Innovation

Presentation of the concepts of sustainable innovation through culture, innovation network and leadership. Specifically, concepts such as innovation leadership are addressed. Focuses on innovation drivers and their implications in stimulating and managing innovation in the workplace. Relevant case studies will be used.

SEM 604: Life Cycle and Risk Assessment

Hands-on experience on how to conduct life cycle and risk assessments. Practical application of these methodologies into products and processes will be discussed. In addition, environmental management systems such as ISO 9000 / 14001 will be discussed.

SEM 605: Energy Management

Overview of sustainable energy management practices in order to increase energy efficiency, and decrease the release of energy-related pollutants into the environment. Coverage materials related to not only energy from conventional sources but also renewable. Special focus on energy conservation will be discussed. Various techniques to lower energy use will be discussed.

SEM 606: Environmental Management

Comprehensive overview of applicable air pollution, water pollution, drinking water and toxics environmental laws and regulations in the U.S. In addition, various pollution sources, and their impact are presented. Specific strategies to develop and implement environmental management practices are presented.

SEM 607: Watershed Management

Overview of the watershed management and planning process.

Relate interdisciplinary topics such as the use of public policies, regulations, and management tools to effectively manage water resources for a sustainable future. Specific case study examples will be used to illustrate the concepts.

SEM 608: Sustainable Buildings

Examination of environmental, economic and social benefits of green building. Specifically addresses the various methodologies that can be integrated into the built environment for energy savings while maintaining the highest indoor environmental quality. Specific strategies to secure LEED certification will be presented.

SEM 609: Sustainable Supply Chain

Examination of how supply chain can be used to improve the sustainable operations of an organization. Specific topics would include the development and implementation of supply chain and organizational policies to meet the global requirements. Relevant case studies will be used to reinforce the concepts.

SEM 610A: Capstone Project Class

(Prerequisite: SEM 601-609)

Focus on the application of sustainability methods learned through this program. The students are to select research topics and conduct research and write a detailed report. During this part of this course, the students define the problem/hypothesis, and gather data from literature searches and/or client organization, if applicable.

SEM 610B: Capstone Project Class

(Prerequisite: SEM 610A)

This continuation course may focus on methodology, data analysis, results, modeling/simulation, conclusions and recommendations related to the project selected. Students are required to present their research in both written and oral form to students and faculty and if applicable to client organization.

School of Health and Human Services

Faculty Update

Lynda M. Puhek Assistant Professor San Diego Main Campus D.N.P. Case Western Reserve University Phone: (866) NU-ACCESS E-mail: lpuhek@nu.edu

(New)

■ BACHELOR OF SCIENCE IN CLINICAL LABORATORY SCIENCE

(This program is for Medical Lab Technicians seeking a Bachelor of Science in Clinical Laboratory Science degree.) (620-514)

Faculty Advisor: Tania Puro • (858) 309-3481 • tpuro@nu.edu

The MLT to BS in Clinical Laboratory Science program provides the Medical Lab Technician (MLT) with an Associate degree from a Medical Lab Technician program an opportunity to complete their BS degree entirely online, at a pace that suits their needs. The program contains necessary prerequisites for application into a post baccalaureate Clinical Lab Sciences traineeship. Some graduates may choose to find employment in the clinical diagnostics/medical device industry, or pursue advanced degrees such as in Healthcare Management.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

• Assess clinical laboratory practice and procedure by applying the knowledge of technical skills and theory obtained.

- Identify problems in the clinical laboratory and establish a course of action to correct them.
- Demonstrate competence in the knowledge and basis of laboratory methods which use advanced analytical, immunological and molecular techniques.
- Interpret and evaluate laboratory procedures and results.
- Demonstrate the ability to critically think and apply knowledge to new situations.
- Conduct research using primary literature sources.
- Produce written work of the standards required by employers in the industry or post graduate programs.

Degree Requirements

To receive the MLT to BS in Clinical Laboratory Science 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. Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

Requirements for the Major

(9 courses; 40.5 quarter units)

NSG 322	Intro to Biomedical Statistics
HSC 300	Legal/Ethical Issues & Hlth Profs
CLS 301	Clinical Biochemistry
	(Recommended: prior completion of CHE 142)
CLS 305	Clinical Immunology
	(Recommended: prior completion of BIO 161, CHE 101 and
	BIO 203 or equivalent)
CLS 310	Clinical Virology
	(Recommended: prior completion of BIO 161, CHE 101, and
	BIO 203 or equivalent)
CLS 315	Molecular Diagnostics
	(Recommended: prior completion of CHE 142 and BIO 162)
CLS 320	Clinical Lab Management
CLS 401	Quantitative Analysis
	(Recommended: Prior completion of CHE 142)
CLS 495	Clinical Lab Science Capstone
	(Prerequisite: Must have completed all required core classes)

Upper-Division Electives

(8 courses; 36 quarter units)

Students must complete a minimum of 36 quarter units (8 courses) of electives to fulfill the upper-division unit requirements for the MLT to Bachelor of Science in Clinical Laboratory Science. At least one of these must be an upper division general education class. Students with certification of lower general education completion may choose electives from the School of Health and Human Services or from the list that follows. Other choices will require approval by a faculty advisor.

The following courses are strongly recommended:

- CIS 301 Management Information Systems
- HSC 310 Issues & Trends in Healthcare
- COM 354 Professional Presentations
- (Prerequisites: ENG 100/101, COM 100 and COM 103 or COM 220)
 HSC 410 Informatics for Health Profs
- HSC 400 Mgt for Health Professionals
- CIS 440 Systems Quality Assurance
- CIS 480 Health Information Management
- HSC 420 Healthcare Research

CLS – Clinical Lab Science

CLS 301: Clinical Biochemistry

(*Recommended: Prior completion of CHE 142*) Explores the physiologic aspect of human metabolism and its role in health and disease. The derivation of energy and nutrients from digestive and absorptive processes, and the synthesis and metabolism of carbohydrates, fats and proteins.

CLS 305: Clinical Immunology

(Recommended: Prior completion of CHE 101, BIO 161 and BIO 203 or equivalent)

Explores the immune system structure and function in health and disease. Topics include hypersensitivity, autoimmunity, immunodeficiency, transplant and tumor immunology, flow cytometry and other immunological techniques.

CLS 310: Clinical Virology

(Recommended: Prior completion of CHE 101, BIO 161and BIO 203 or equivalent)

Exploration of viral structure, classification, properties and interaction of viruses with cells, organisms and populations, viral cultivation, the laboratory diagnosis of viral infections, and prevention and control of infection.

CLS 315: Molecular Diagnostics

(*Recommended: Prior completion of BIO 162 and CHE 142*) This course provides an overview of the principles of clinical molecular diagnostics, the use of molecular techniques to diagnose disease, quality assurance in the molecular lab and DNA based tissue typing.

CLS 320: Clinical Lab Management

Exploration of financial, personnel-related, operational and marketing issues affecting the clinical laboratory.

CLS 401: Quantitative Analysis

(*Recommended: Prior completion of CHE 142*) Study of established methods and instrumentation used in chemical analysis including titration, extraction, chromatography, spectroscopy, buffers, electrochemistry and kinetic methods.

CLS 495: Clinical Lab Science Capstone

(*Prerequisite: Must have completed all required core classes.*) A student initiated project in the field of clinical laboratory science, which culminates in a written report, presented in a scholarly format.

(New)

■ BACHELOR OF SCIENCE MAJOR IN RADIATION THERAPY

(620-515)

Program Director: Stephanie Eatmon • (858) 309-3473 • shhs@nu.edu

The Bachelor of Science in Radiation Therapy builds on a broadbased foundation in liberal arts and sciences designed to strengthen critical thinking and communication skills to work with a diverse population in multiple health care settings. Graduates of this program will be able to understand all aspects of radiation therapy including effective patient care and education, treatment planning and radiation physics as well as the biological effects of radiation in a rapidly advancing high touch, highly technical profession.

The Radiation Therapy Program combines classroom with clinical experiences to prepare graduates for an entry level position in the profession as an integral member of the health care team using radiation to treat cancer and some benign diseases. Graduates will use their competencies to assess the physical, emotional and educational needs of the patients they serve, determine the efficacy of a prescribed treatment and carry out the accurate delivery and documentation of treatment.

The Radiation Therapy Program is a full-time, lock-step program in which each cohort of students progress in unison, taking each of the courses in a sequenced manner. Courses in the program build on knowledge from courses previously completed. Students will also take two courses in one month as scheduled. Once the program is completed, students will be eligible to apply to sit for the American Registry of Radiologic Technologists (ARRT) national examination and apply for certification from the California Department of Public Health, Radiologic Health Branch. The Radiation Therapy Program is currently seeking accreditation by the California Department of Public Health, Radiologic Health Branch and the Joint Review Committee on Education in Radiologic Technology (JRCERT).

The Radiation Therapy Program prepares the graduate to be able to fulfill the following outcomes as an entry-level professional.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Effectively communicate with patients/families and members of the health care community.
- Demonstrate patient, radiation and equipment safety at all times.
- Demonstrate clinical competence in the areas of patient care, treatment, simulation, dosimetry and brachytherapy.
- Formulate priorities in daily clinical practice.
- Apply concepts of teamwork.
- Deliver a prescribed course of treatment adhering to acceptable departmental, institutional, governmental and professional standards.
- Evaluate the clinical significance of the treatment parameters as prescribed to suspend treatment as appropriate.
- Develop plans based on patient assessment to address physical, emotional, and educational needs.
- Assess patient side effects and complications to create an interdisciplinary management strategy that fosters prevention, healing and comfort.
- Demonstrate the ability to critically think and apply knowledge to new situations.
- Analyze clinical data to ensure safety and quality improvement of radiation therapy operations.
- Evaluate treatment plans to ensure accurate and effective treatment delivery.
- Demonstrate values and attitudes congruent with the profession's standards and ethics.
- Analyze current health care research for application to the radiation therapy practice.
- Apply strategies that promote professional development and lifelong learning.

Admission Requirements

Students seeking to study radiation therapy at National University must:

- Meet all requirements for admission to an undergraduate degree program at the University as outlined in the University Catalog.
- Have obtained a 2.50 cumulative GPA from all regionally accredited institutions attended.
- Students must complete a minimum of 40 hours of observation in a radiation therapy department. A completed time sheet must be signed by the therapist at the observation site. Time sheets and a list of observations sites are available in the radiation therapy office.
- Submit a minimum of 3 letters of reference forms from radiation therapists in the department where the student observed, teachers, and/or an employer. Reference forms are available from the radiation therapy office.
- Submit a separate application for admissions to the Department of Health Science, Radiation Therapy program.
- Complete the written essay included with the application packet.
- Interview with the Radiation Therapy Admissions Committee.

*Note: Meeting the minimum requirements, as listed above, does not guarantee admissions into the radiation therapy program.

Admission Process

Admission to the radiation therapy program is a three-step process: 1) Application to the University; 2) Application to the respective radiation therapy program; and 3) Participation in an interview with the Radiation Therapy Program Admission Committee. Prospective students should follow the University application requirements listed in the "General Admission Procedures" section of this catalog. In addition, prospective radiation therapy students will complete a separate application for admission. These applications, with supporting documentation, are accepted in January and should be sent to the Radiation Therapy Program Director. A minimum GPA of 2.50 is required for entry into the Radiation Therapy Program.

A prospective student should first meet with an Admissions Advisor. The advisors are located at each of the University campus offices. The prospective student will arrange to have transcripts from all other Colleges and Universities sent to National University. These courses will be evaluated for equality to National University Department of Radiation Therapy required prerequisite courses. All prospective students will enroll in RTT 200 Introduction to Radiation Therapy. This course will review all aspects of the Radiation Therapy curriculum and program and profession to provide applicants with a knowledge base to form their decision to enter the program.

A Calculation Worksheet will be used to evaluate each prospective student's application packet by the Radiation Therapy Admissions Committee. The prospective student will be ranked in comparison to the other applicants during that application year.

The scoring will be based on:

- Quality of grades in the prerequisite courses.
- Number of attempts to achieve a passing grade in the prerequisite courses.
- Ranking of the recommendation letters.
- Number of hours of clinical observation.
- Knowledge of the profession.
- Written essay included with the application packet.
- Ranked interview.

Once all prospective students for a given year have been interviewed, the Radiation Therapy Admissions committee will rank applicants based on the interview and application materials. The highest ranked individuals will be admitted to the program until all class positions are filled. There is no waiting list.

Students who are not accepted may re-apply for admissions process in the following year. They are encouraged to speak with the Program Director about strategies to strengthen their application. Before participating in clinical internship, students must submit proof of the Radiation Therapy Health Clearance, current health insurance and current Cardio-Pulmonary Resuscitation (CPR) certificate from the American Heart Association (BLS-Basic Life Support for Health Care Providers). Students are responsible for determining if their health insurance coverage includes provisions for emergency room visits in the event of a needle stick or other injury in the clinical setting. Students are responsible for meeting all of the above requirements.

Background Checks

Radiation therapy departments used by the Radiation Therapy Option require criminal background and drug screening prior to internship. Students who do not pass the background check and/or drug test may be unable to attend the internship, 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. Students will need to provide their own transportation to class and clinical internship. Proof of auto insurance and a valid driver's license is required.

Students successfully completing the Radiation Therapy Program will be eligible to apply for state and national examinations. Application for the national exam will be provided in the last course of the Program. Students are responsible for submitting applications and fees to the State of California and the American Registry of Radiologic Technologists (ARRT).

Important Notes

An application to the California Department of Health and Human Services: Radiologic Health Branch for state approval of the BS in Radiation Therapy program is currently being prepared. Upon state approval, graduates of the BS in Radiation Therapy would be eligible to sit for the California Licensure Examination to become a Registered Radiation Therapist. An application is also being prepared for accreditation of the BS in Radiation Therapy by the Joint Review Committee on Education in Radiologic Technology (JRCERT). JRCERT accreditation of the BS in Radiation Therapy program will allow graduates to sit for the Registered Radiation Therapist Licensing examination in other states.

Individuals interested in applying for admission to the BS in Radiation Therapy upon state approval should review the list of prerequisite courses listed in the March 2010 Catalog Addendum. Completion of the prerequisite courses would prepare the individual to apply for admission to the program once it is approved by the California Department of Health and Human Services: Radiologic Health Branch.

It is recommended that individuals wishing to eventually apply for admission to the BS in Radiation Therapy upon state approval consider applying now for admission to the BS in Public Health. Admission to the BSPH program will allow an individual to enroll in prerequisite courses.

While every attempt will be made to obtain state approval and JRCERT accreditation, there is no guarantee the application will be successful and no definitive date for approval can be provided.

Degree Requirements

To receive a Bachelor of Science degree in Radiation Therapy, students must complete at least 184.5 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 education 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 matriculation.

Preparation for the Major

(17 courses; 67.5 quarter units)

COM 103	Oral Communication * #
MTH 215	College Algebra * #
	(Prerequisite: Placement Evaluation)
NSG 322	Intro to Biomedical Statistics * #
ILR 260	Information Literacy * #
	(Prerequisite: ENG 100/101)
PSY 100	Introduction to Psychology *
SOC 100	Principles of Sociology *
	(Prerequisite: ENG 100/101)
BIO 161	General Biology 1*
BIO 201	Human Anatomy & Physiol I * #
	(Recommended: prior completion of BIO 100 and 100A, CHE
	101 and 101A or equivalent courses.)
BIO 201A	Human Anatomy and Physiol Lab I *
	(Prerequisite: BIO 201)
BIO 202	Human Anatomy & Physiol II * #
	(Recommended: prior completion of BIO 201 and 201A, BIO
	100 and 100A, CHE 101 and 101A or equivalent courses.)
BIO 202A	Human Anatomy & Physiol Lab II *
	(Prerequisite: BIO 202)
BIO 203	Introductory Microbiology *
	(Recommended: prior completion of BIO 201 and 201A BIO
	202 and 202A, BIO 100 and 100A, CHE 101 and 101A or
	equivalent courses.)
BIO 203A	Introductory Microbiology Lab *
	(Prerequisite: BIO 203)

PHS 171	General Physics 1 * #
	(Prerequisite: MTH 215 or MTH 216A & 216B)
PHS 172	General Physics 2 * #
	(Prerequisite: PHS 171)
RTT 200	Introduction to Radiation Therapy #
HIS 350	Cultural Diversity *
	(Prerequisite: ENG 100/101)
or	
SOC 331	Sociology of Health and Illness
	(Prerequisites: ENG 100/101 and SOC 100)

* May be used to satisfy a General Education requirement

Requirements for the Major

(18 courses; 81 quarter units)

RTT 300	Medical Imaging #
	(Prerequisite: RTT 200 with a minimum grade of C
	Acceptance into the Radiation Therapy Program.)
RTT 305	Patient Care I #
	(Prerequisites: BIO 201, BIO 202, BIO 203 and RTT 300 with
	a minimum grade of C in each)
RTT 306	Patient Care II #
DTT 210	(Prerequisite: RTT 305 with a minimum grade of C)
RTT 310	Sectional/Topographic Anatomy # (Prerequisites: BIO 201 and BIO 202 with a minimum grade
	of C in each)
RTT 315	Clinical Concepts I #
K 11 515	(Prerequisites: RTT 305 and RTT 306 with a minimum grade
	of C in each)
RTT 316	Clinical Concepts II #
	(Prerequisites: RTT 315 and RTT 480 with a minimum grade
	of C in each)
RTT 317	Clinical Concepts III #
	(Prerequisite: RTT 316 with a minimum grade of C)
RTT 320	Pro Ethics and Legal Issues #
	(Prerequisite: RTT 300 with a minimum grade of C)
RTT 410	Clinical Radiation Physics I #
	(Prerequisites: MTH215, PHS171 and RTT 300 with a
RTT 411	minimum grade of C in each) Clinical Radiation Physics II #
K11411	(Prerequisite: RTT 410 with a minimum grade of C)
RTT 415	Clinical Oncology #
	(Prerequisites: RTT 305, RTT 306, RTT 310 and RTT 480
	with a minimum grade of C in each)
RTT 416	Clinical Oncology II #
	(Prerequisite: RTT 415 with a minimum grade of C)
RTT 420	Radiation Biology #
	(Prerequisite: RTT 410, RTT 411, RTT 415, RTT 416 and
DTT 440	RTT 481 with a minimum grade of C in each)
RTT 440	Research in Radiation Therapy #
	(Prerequisites: NSG 322, RTT 315, RTT 316, RTT 317, RTT 410, RTT 411, RTT 415 and RTT 416 with a minimum grade
	410, K11 411, K11 415 and K11 416 with a minimum grade of C in each)
RTT 450	Quality Management #
1011 100	(Prerequisites: RTT 410 and RTT 411 with a minimum grade
	of C in each)
RTT 455	Medical Dosimetry #
	(Prerequisites: RTT 315, RTT 316, RTT 317, RTT 410 and
	RTT 411 with a minimum grade of C in each)
RTT 460	Operational Issues #
	(Prerequisites: RTT 316 and RTT 416 with a minimum grade
	of C in each)
RTT 490	Advanced Capstone #
	(Prerequisite: Completion of major requirements)
Deer	and a Flasting Courses
Recomme	ended Elective Courses

(4 courses; 18 quarter units)

GER 310	Healthy Aging
HSC 410	Informatics for Health Profs
HSC 310	Issues & Trends in Healthcare
HUB 401	Conflict Resolution
	(Prerequisites: ENG 100/101 and PSY 100)

Internships

(3 courses; 13.5 quarter units)

After completing all required coursework, students meet with the Program Director/Clinical Coordinator for placement prior to the internship. (The internship must be completed at the assigned radiation therapy clinical sites / 1664 hours)

- A minimum of 1664 hours is required. Students will complete a weekly clinical log, clinical rotation evaluations and competencies. These will be reviewed weekly during the class meeting. Internship consists of the following:
 - Clinical experience at a minimum of three affiliated radiation therapy departments as selected by the Program Director/Clinical Coordinator.
 - Weekly two-hour classroom meeting.

RTT 480	Internship I #
	(Prerequisites: RTT 300, RTT 305, RTT 306, RTT 310 and
	RTT 320 with a minimum grade of C in each)
RTT 481	Internship II #
	(Prerequisite: Satisfactory completion of RTT 480)

RTT 482 Internship III # (Prerequisite: Satisfactory completion of RTT 481)

Note: RTT 480 requires 408 hours, RTT 481 and RTT 482 require 640 hours each.

+ Students must pass each course with a C or better before continuing in the program. Courses are taken in a specific order.

Courses required for professional accreditation

RTT – Radiation Therapy

RTT 200: Introduction to Radiation Therapy

Foundations in radiation therapy and the practitioner's role in the health care delivery system. Principles, practices and policies of the educational program, health care organizations, principles of radiation and health safety and professional responsibilities of the radiation therapist.

RTT 300: Medical Imaging

(Prerequisite: RTT 200 with a minimum grade of C Acceptance into the Radiation Therapy Program.)

Designed to establish a knowledge base in factors that govern and influence the production and recording of radiographic images for patient simulation, treatment planning and treatment verification in radiation oncology. General radiography, computerized tomography, sonography and nuclear medicine imaging modalities and equipment will be emphasized. An overview of radiation protection will be provided.

RTT 305: Patient Care I

(Prerequisites: BIO 201, BIO 202, BIO 203 and RTT 300 with a minimum grade of C in each)

Foundation in terminology, concepts and competencies in assessment and evaluation of the patient for service delivery. Examination of the psychological and physical needs and factors affecting treatment outcomes. Routine and emergency care procedures will be discussed.

RTT 306: Patient Care II

(*Prerequisite: RTT 305 with a minimum grade of C*) Focuses on assessment, evaluation and treatment plans for treatment related side effects. Issues related to death and dying and practitioner self-care will be discussed. Course also includes an exploration of local, state and national cancer care resources.

RTT 310: Sectional/Topographic Anatomy

(*Prerequisites: BIO 201 and BIO 202 with a minimum grade of C in each*) Identification of anatomical structures on a variety of medical imaging formats. Basic anatomical relationships will be compared and located using topographical and cross-sectional images.

RTT 315: Clinical Concepts I

(*Prerequisites: RTT 305 and RTT 306 with a minimum grade of C in each*) Overview of cancer and the specialty of radiation therapy. The historic and current aspects of cancer treatment along with basic principles and practice of treatment and simulation will be emphasized.

RTT 316: Clinical Concepts II

(*Prerequisites: RTT 315 and RTT 480 with a minimum grade of C in each*) Current principle and practice of treatment for cancers of the skin, brain, head and neck, thorax and gastrointestinal tract are emphasized.

RTT 317: Clinical Concepts III

(*Prerequisite: RTT 316 with a minimum grade of C*) Current principle and practice of treatment for cancers of the genitourinary, lymphoreticular, musculoskeletal, integumentary, hematopoietic, endocrine systems and pediatric cancers are emphasized.

RTT 320: Pro Ethics and Legal Issues

(*Prerequisite: RTT 300 with a minimum grade of C*) Designed to provide sequential development, application, analysis, integration and evaluation of ethical and legal concepts and theories as they relate to radiation therapy practice.

RTT 410: Clinical Radiation Physics I

(Prerequisites: MTH 215, PHS171 and RTT 300 with a minimum grade of C in each)

Focus in on the characteristics and interactions of electromagnetic and particulate radiation. X-ray production, equipment, measurement and quality of radiation produced and radiation safety.

RTT 411: Clinical Radiation Physics II

(*Prerequisite: RTT 410 with a minimum grade of C*) A clinical focus of radiation therapy physics that examines factors related to absorbed dose, calculation of dose from all sources of radiation, principles of treatment planning and an overview of advanced technologies.

RTT 415: Clinical Oncology

(Prerequisites: RTT 305, RTT 306, RTT 310 and RTT 480 with a minimum grade of C in each)

A focus on cancer and current treatment modalities with emphasis on radiation therapy. Designed to examine and evaluate the management of neoplastic disease. Cancers of the skin, brain, head and neck, thorax, and gastrointestinal tract are emphasized. The epidemiology, etiology, natural history, diagnosis, treatment strategies, sequelae and prognosis are discussed.

RTT 416: Clinical Oncology II

(*Prerequisite: RTT 415 with a minimum grade of C*) Further exploration of cancer and current treatment modalities with emphasis on radiation therapy. Cancers of the genitourinary, lymphoreticular, musculoskeletal, integumentary, hematopoietic and endocrine systems. The epidemiology, etiology, natural history, diagnosis, treatment strategies, sequelae and prognosis are discussed.

RTT 420: Radiation Biology

(Prerequisite: RTT 410, RTT 411, RTT 415, RTT 416 and RTT 481 with a minimum grade of C in each)

Principles and concepts to include radiation effects on cellular, organ, system and levels within the entire body. Emphasis of the theories and principles of tolerance dose, time-dose relationships, fractionation schemes and the relationship to clinical practice of radiation therapy.

RTT 440: Research in Radiation Therapy

(*Prerequisites:* NSG 322, RTT 315, RTT 316, RTT 317, RTT 410, RTT 411, RTT 415 and RTT 416 with a minimum grade of C in each) This course will address reading and conducting research in radiation therapy. Research approaches and procedures will be explored. Examples of various research methods and techniques will be discussed.

RTT 450: Quality Management

(*Prerequisites: RTT 410 and RTT 411 with a minimum grade of C in each*) Content is designed to focus on the components of quality improvement programs in radiation oncology. Includes quality control and assurance checks for clinical aspects of patient care, medical records, treatment delivery and localization and treatment planning equipment. Legal and regulatory implications for maintaining appropriate quality care will be covered.

RTT 455: Medical Dosimetry

(Prerequisites: RTT 315, RTT 316, RTT 317, RTT 410 and RTT 411 with a minimum grade of C in each)

Content is designed to examine factors that influence and govern clinical planning of patient treatment. This encompasses isodose distributions, influence of beam modification, radiobiologic considerations, dosimetric calculations and clinical application of radiation. Electromagnetic and particulate beams as well as advanced and emerging technologies are covered.

RTT 460: Operational Issues

(*Prerequisites: RTT 316 and RTT 416 with a minimum grade of C in each*) Management, assessment, quality improvement and evaluation techniques will be emphasized. Human resource concepts and regulations impacting the profession will be examined. Accreditation agencies and regulations, billing and reimbursement issues pertinent to the radiation therapy department will also be covered.

RTT 480: Internship I

(Prerequisites: RTT 300, RTT 305, RTT 306, RTT 310 and RTT 320 with a minimum grade of C in each)

Content is designed to provide sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in radiation therapy. Objectives and competencies in this course focus on patient – centered care, team work principles, introduction to and safety procedures for treatment and simulation equipment, and lower level treatment procedures. Requires 136 hours/quarter unit and 2 hours of classroom meeting/week.

RTT 481: Internship II

(Prerequisite: Satisfactory completion of RTT 480)

Continuation of clinical internship practice. This course focuses on specific principles and techniques utilized for assigned cancer treatments. Students will demonstrate clinical competencies in the application of specific radiation therapy techniques. Requires 136 hours/quarter unit and 2 hours of classroom meeting/week.

RTT 482: Internship III

(Prerequisite: Satisfactory completion of RTT 481)

Continuation of clinical internship practice. This course focuses on advanced principles and techniques utilized for specific cancer treatments. Students will demonstrate competence in the deliver and simulation of specific radiation therapy techniques and medical dosimetry. Requires 136 hours/quarter unit and 2 hours of classroom meeting/week.

RTT 490: Advanced Capstone

(Prerequisite: Completion of major requirements)

A capstone course that examines historical and current issues within the profession as a radiologic professional. Preparation for entry into the profession and completion of capstone project will be accomplished. Professional roles, responsibilities and development will be emphasized.

(New)

GRADUATE CERTIFICATE IN INTEGRATIVE HEALTH

(770-906)

Faculty Advisor: Ellen Kaye Gehrke • (858) 309-3482 • ekayegehrke@nu.edu

The Graduate Certificate in Integrative Health and Wellness is designed for health care practitioners, students, and those interested in seeking to understand more about the emerging field of integrative health and healing. Combining the therapies and practices of conventional medicine and complementary and alternative medicine, integrative health focuses on healing rather than disease. It emphasizes a therapeutic relationship between client and practitioner, utilizes a holistic perspective, and supports the integration of mind, body, and spirit.

Topics in this unique certificate program examine spirituality and health, stress management, legal and ethical issues of integrative health, healing environments, energy medicine, Chinese medicine, Ayurveda, and nutrition and fitness.

The Graduate Certificate in Integrative Health and Wellness will enhance the learner's knowledge, skill, and experience through a thoughtfully designed curriculum that:

- Provides a broad foundation of evidence-based information addressing the complexities of this field of study;
- Addresses the interconnectedness of mind, body, and spirit;
- Explores healing philosophies and health systems as well as the impact of social, cultural, environmental, and global perspectives on healing;
- Describes the importance of personal responsibility and the dynamic, integral relationship between client and practitioner in the healing process; and
- Examines the emerging and complex ethical and legal issues surrounding this field of study.

Graduates of this certificate program will be able to apply their new knowledge and skills in many settings including acute care facilities, private clinical practices, nursing homes, wellness centers, chronic disease centers, health clubs, and corporate settings.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Examine the nature of stress as an integrative approach to balance the mind, body, and spirit.
- Describe the philosophies that support healing environments and describe creating the sacred spaces and spiritually healing environments.
- Examine energy medicine as an integrative approach to balance the mind, body, and spirit, and differentiate the meridians as energy pathways.
- Explain the role of herbs and herbalism in nutrition and health.
- Describe the physiological effects of movement and exercise.
- Compare and contrast spirituality in different groups.
- Differentiate between religion and spirituality.
- Describe the origins of Ayurvedic medicine and explain how diseases are manifested in the doshas.
- Explain the seven elements used by states to define the practice of medicine.
- Explain the impact of key food and drug laws and clinical drug trials relative to complementary and alternative therapies.

Certificate Requirements

(8 courses; 36 quarter units)

To receive the Graduate Certificate in Integrative Health students must complete the following coursework:

IHM 600	Integrative Stress Management
IHM 605	Healing Environments
IHM 615	Nutrition and Fitness
IHM 625	Energy Medicine
IHM 630	Spirituality, Health & Healing
IHM 632	Chinese Medicine
IHM 635	Ayurveda
IHM 640	Legal and Ethical Issues

IHM 600: Integrative Stress Management

Examination of an integrative approach to stress, types of stressors, physiology of stress, stress and disease and theoretical models of disease. Stress emotions of anger and fear, journaling, expressive art

therapy, humor therapy will be explored. Discussion of diaphragmatic breathing, meditation, hatha yoga, imagery, visualization and music therapy. Massage therapy, Tai Chi, and progressive muscular relation will be explored.

IHM 605: Healing Environments

Our environments not only express who we are but also impact how we feel. They support our body, mind, and spirit. This course examines the definition, history of, and barriers to creating healing environments, describes elements of healing environments, discusses philosophies of healing spaces, natural elements utilized to create them, explores elements of healing relationships, and the importance of education and knowledge.

IHM 615: Nutrition and Fitness

Leading a healthy, balanced life is dependent on many variables. Two important variables include a nutritious diet and daily physical activity. There are many elements to consider when developing a nutritious diet and creating a lifestyle in which movement and activity are integral to our day. Understanding these elements helps us make informed choices about how we nourish our body, mind, and spirit.

IHM 625: Energy Medicine

Examination of an integrative approach to energy medicine to balance the mind, body, and spirit. Energy testing, the meridians, chakras, aura, electrics, Celtic weave, and the basic grid will be explored. A discussion of five rhythms, triple warmer, radiant circuits and strategies for health and wellness, nature of pain, energy techniques to relieve pain, creating an electromagnetic environment that supports health, maintaining optimum health will be explored.

IHM 630: Spirituality, Health & Healing

This course will examine an integrative approach to spirituality, health, and healing. The characteristics of spirituality, spirituality and the care provider and spiritual rituals will be explored. Next, there will be a discussion of providing spiritual care, spiritual assessment, therapeutic interventions, and healing environments. Lastly, the spiritual dimension in end-of-life care, and spiritual considerations of children and the aging individual will be explored.

IHM 632: Chinese Medicine

This course will examine an integrative approach to Chinese medicine, provide an understanding of the history, fundamental concepts and theories as well as its philosophical and cultural basis. Diagnosis in Chinese medicine, acupuncture and Tui Na (therapeutic bodywork), will be explored. Traditional Chinese pharmacotherapy and Chinese dietetics will be described. Lastly, qi gong, tai ji quan, and areas for future research will be explored.

IHM 635: Ayurveda

Ayurvedic medicine is an ancient healing system that is between 3,500 and 5,000 years old. Translated as the "science of life," Ayurveda believes that everything has specific elemental qualities as well as a specific constitution based on the relationship between three vital energies or doshas. This course will examine Ayurveda, including its origins, the role of doshas, the disease process, the importance of lifestyle regimens, and treatments of disease.

IHM 640: Legal and Ethical Issues

Legal and ethical issues related to the provision of complementary and alternative care are complex and evolving. Examination of biomedicine, regulation of medicine, scope of practice, and credentialing processes. Exploration of malpractice, liability, informed consent, and making referrals. Review of the disciplinary process, legal authority in medicine, and issues related to healing. Discussion of access to treatment, third-party reimbursement, and dietary supplement regulation.

School of Media and Communication

(New Courses)

COM 120: Intro to Interpersonal Comm

An introduction to the principals and application behind effective interpersonal communication. Students will study various styles of interpersonal communication, apply different techniques, and evaluate their effectiveness. Important components of interpersonal communication that include listening, conflict management, and developing and maintaining relationships, will be addressed in the personal and professional setting.

COM 303: Digital Literacy 2.0

(Prerequisite: ENG 100/101)

A multidisciplinary course about knowledge management in the 21st Century: tools, acquisition, evaluation, synthesis, formatting, presentation, and sharing. Essential digital skills to participate in the collaborative learning, work, and social environments of Web 2.0.

Terminated Programs and Courses

Master of Fine Arts in Video Gaming All MGP courses

(New and Modified Programs)

(Modified) ■ BACHELOR OF ARTS MAJOR IN DIGITAL ENTERTAINMENT AND INTERACTIVE ARTS ~[®]

(610-115)

Faculty Advisor: John Banks • (858) 309-3441 • 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, multimedia and game production. Students learn and apply theory and practice for producing digital media with a focus on creating original works. Successful completion of the program will enable graduates to compete for employment because they possess a relevant combination of skills and knowledge vital to today's workplace. Positions in the fields of gaming, video and multimedia production, motion graphics and design include Art Director, Web Designer, Game Designer, Video Editor, Project Manager and Multimedia Specialist.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop and utilize a personal vision in the creation of original multimedia content.
- Apply the principles of graphic and information design in the generation of digital media projects
- Identify and analyze current trends and key technologies in the media industry.
- Communicate effectively with clients and production team members using oral, visual, and written methods.
- Describe and implement the phases of media production, from the initial planning to the final delivery of a professional product
- Explain the relevant legal issues related to media production and distribution
- Create active and interactive content with graphics, animation, sound and video using media authoring software
- Design a professional electronic portfolio that demonstrates writing and design competency in a variety of media, including 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.

Preparation for the Major

(2 courses; 9 quarter units)

COM 100	Introduction to Mass Communication*
and	
COM 103	Oral Communication*
or	
COM 220	Media Literacy*
	5

*Course may be used to satisfy General Education requirements

Requirements for the Major

(16 courses; 72 quarter units)

MUL 300	Convergence Media
	(Prerequisites: COM 100 and COM 103 or COM 220)
BRO 305	Media Storytelling
	(Prerequisites: ENG 100/101 and COM 100 or COM 103 or
	COM 220)
MUL 305	Graphic Design and Artistry
	(Prerequisites: COM 100 and COM 103 or COM 220)
MUL 309	Camera and Image
	(Prerequisites: COM 100 and COM 103 or COM 220))
MUL 365	Digital Video Editing
	(Prerequisites: COM 100 and COM 103 or COM 220)
MUL 461	Motion Graphics
	(Prerequisites: COM 100 and COM 103 or COM 220)
MUL 345	Applied Web Design
	(Prerequisites: COM 100 and COM 103 or COM 220)
MUL 370	Digital Interactivity
	(Prerequisites: COM 100 and COM 103 or COM 220)
MUL 315	Video Game Design
	(Prerequisites: COM 100 and COM 103 or COM 220)
MUL 355	Game Scripting
	(Prerequisites: COM 100 and COM 103 or COM 220)
MUL 375	3D Modeling for Game Art
	(Prerequisites: COM 100 and COM 103 or COM 220)
MUL 462	Digital Audio Creation
	(Prerequisites: COM 100 and COM 103 or COM 220)
MUL 399	Emerging Technologies
	(Prerequisites: COM 100 and COM 103 or COM 220)
MUL 445	Digital Project Management
	(Prerequisites: COM 100 and COM 103 or COM 220)
MUL 430	Advanced Design Project
	(Prerequisites: COM 100 and COM 103 or COM 220)
MUL 471	Advanced Digital Interactivity Project 4.5
	(Prerequisites: COM 100 and COM 103 or COM 220)
	•

Capstone Core Course

(1 course; 4.5 quarter units)

MUL 420	Multimedia Arts Portfolio Project
	(Prerequisites: all general core classes)

(New or Modífied Courses)

MUL 305: Graphic Design and Artistry (Modified)

(*Prerequisites: COM 100 and COM 103 or COM 220*) Hands-on application of principles and techniques of graphic design for print, video and digital media. Covers concepts including color theory, composition, photo manipulation and special effects in digital production. Additionally, the class focuses on understanding and defining a personal style in the digital visual medium.

MUL 309: Camera and Image (New)

(*Prerequisites: COM 100 and COM 103 or COM 220*) Hands on, project based class exploring the use of still and video cameras in production. Focus will be on a balance between the technical and the aesthetic. Essential camera functions are well know and timeless. The technologies utilized in cameras are rapidly advancing. This intersection will be our focus.

MUL 365 Digital Video Editing (Modified)

(*Prerequisites: COM 100 and COM 103 or COM 220*) 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 color. Focus is placed on the role of editing in telling a compelling story.

MUL 375: 3D Modeling for Game Art (Modified)

(*Prerequisites: COM 100 and COM 103 or COM 220*) 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 399: Emerging Technologies (New)

(*Prerequisites: COM 100 and COM 103 or COM 220*) Topical lectures and investigations into new trends and technologies in the Digital Entertainment field. The class explores developing technological trends and the strategies for utilizing them in the production of content. The focus will be on integrating the new tools and trends into multimedia production

MUL 430: Advanced Design Project (Modified)

(*Prerequisites: COM 100 and COM 103 or COM 220*) An advanced course in digital graphic manipulations. Students produce a portfolio of images, applying aesthetic and composition design principles. Covers strategies to create focused and clear imagery that conveys a clearly defined message. Students continue to

work on the visual themes they have developed in earlier courses.

MUL 445: Digital Project Management (Modified)

(*Prerequisites:* COM 100 and COM 103 or COM 220) Advanced course in understanding and planning the production of a multimedia project. Covers the concept of the production pipeline and sets the basis and timeline for the final project. Students plan and present ideas for a major digital entertainment project.

(Modífied)

MASTER OF ARTS IN DIGITAL JOURNALISM

(710-508)

Faculty Advisor: Sara-Ellen Amster • (714) 429-5311 • samster@nu.edu

The Master of Arts in Digital Journalism prepares learners to become dynamic new media professionals capable of using emerging technologies to generate, create, and disseminate news and analysis in a competitive, fast-moving global information environment.

The program is designed for learners who plan to engage in information gathering and dissemination via multiple media channels: online journalism and news, education, newsletter publishing, business intelligence, marketing and other business research, non-profit organization policy and position paper publishing, and other fact-finding and reporting activities. The changing nature of 21st-century communication requires highly skilled professionals who can respond to today's 24-hour information-on-demand cycle. Learners will be armed with theoretical and practical approaches to help them and their organizations meet the world's voracious appetite for news – clear, accessible and relevant knowledge and analysis. Taught entirely online, the program will link new media practitioners internationally with each other to exchange current experience and practices. It will provide training in backpack video skills, which are in demand in the new media marketplace that now spans every industry. Coursework will marry non-traditional multimedia skills with the proven journalistic foundations, legal underpinnings, and ethics of reporting practice. It will teach students how to find, investigate, gather, analyze, organize, present, and disseminate complex information to intended audiences. Near the end of this 13month program, students will be matched with mentors in the new media and communications fields. Along the way, they will create an electronic portfolio designed to help them gain employment and build their careers.

The degree requires that students are able to write in English at an advanced level and are flexible enough to learn the latest technological skills that new media professionals need. Students must already possess a bachelor of arts degree. They must prove basic competency in fundamental digital skills or enroll in the tutorials offered in Essential Digital Competencies, JRN 502, as a companion course to their other studies. If a student's writing skills need improvement, he or she may be required to enroll in a remedial writing class before continuing in the program. Applicants for whom English is a second language are encouraged to take the Accuplacer English as a second language test to estimate their ability to succeed in the program. Consultation with the advisor is required. Essential Digital Competencies, JRN 502, must be taken prior to Video Journalism, JRN 610.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop digital informational content (text, graphics, audio, video) for dissemination across multiple media platforms.
- Evaluate the effect of information and knowledge management structures on accuracy and reliability in news media publications.
- Employ emerging media practices within ethical and legal boundaries.
- Examine and create interactive online publications for a global audience.
- Critique business models and evaluate their effectiveness in the emerging media world of contemporary journalism.
- Collect and analyze news and information gathered from computer databases.
- Compare past and present trends in news writing, reporting and editing.

JRN 502 Essential Digital Competencies Information

These are the ways JRN 502 may be waived. Incoming students may be asked by their advisor to demonstrate knowledge in six key skill areas: shooting photographs, editing photographs, shooting video, editing video, recording audio and editing audio.

Option 1 — If they already possess basic skills in these areas, they will turn in a 90-second video with audio. If the video lacks audio, students must submit a separate digital recording that shows they can record and edit audio. They can upload their video to youtube.com and send the link to the advisor.

Option 2 — If students cannot submit a video or audio, they must consult with their journalism advisor on which tutorials they need to take online based on their skill levels. These tutorials are available free as shareware or at low cost from various journalism organizations and vendors.

Option 3 — Students who feel they need supervision in each or all of these areas must take Essential Digital Competencies or JRN 502.

Degree Requirements

(14 courses, 60 quarter units)

To receive a Master of Arts in Digital Journalism students must

complete at least 58.5 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 13.5 quarter units at the graduate level from a regionally accredited institution provided the units have not been used to satisfy the requirements of an awarded degree and the Faculty Advisor determines the course content is applicable to the program. 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. The capstone in this program will be developed individually with the advisor and may include an internship in a student's home community or one arranged through National University's student newspaper.

Prerequisite for the Program

(1 course; 1.5 quarter units)

JRN 502 Essential Digital Competencies (1.5 quarter units)

Core Requirements

(13 courses; 58.5 quarter units)

JRN 600	Multimedia Journalism
JRN 605	Advanced Feature Writing
JRN 610	Video Journalism
	(Prerequisite: JRN 502)
JRN 615	International Journalism
JRN 620	Producing the Online Publication
JRN 630	Advanced Editing
JRN 640	The Business of Journalism
JRN 650	Computer-Assisted Reporting
JRN 655	Seminar in Law
JRN 656	Seminar in Ethics
JRN 660	Specialty Reporting
JRN 670	Enterprise Reporting
JRN 680	Capstone Project

(New Course)

JRN 502: Essential Digital Competencies

(1.5 quarter units)

Guides students through online tutorials and DVD training in four technical areas of journalism: 1) digital video editing, 2) audio recording and editing, 3) interactive content creation on the Web and 4) image/photo editing. Students complete online tutorials or DVD training in each area in which they lack basic proficiency. Students must take tutorials or training unless they can demonstrate proficiency in one or more of the areas before the second week of class begins. Work demonstrating a student's proficiency must be received and approved by the instructor during the first week of course work to fulfill the "test-out" option. Course is grades on a Satisfactory/Unsatisfactory basis.

NEVADA

(Modified) 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 degree provides the academic pathway for students who are committed to the practice of professional counseling. The program includes core courses that all students must take, and three optional tracks:

The MA Counseling Psychology – Non-licensure specialization meets the academic requirements for many jobs in the human services field throughout Nevada in both public and private domains.

The MA Counseling Psychology – Nevada LCPC Specialization meets the academic requirements to be eligible for licensing as a licensed clinical professional counselor by the Nevada Board of Examiners for Marriage and Family Therapists and Licensed Professional Counselors.

The MA Counseling Psychology – Nevada MFT Specialization meets the academic requirements to be eligible for licensure as a marriage and family therapist by the Nevada Board of Examiners for Marriage and Family Therapists and Licensed Professional Counselors.

The degree may not meet requirements in other states. Students should consult the licensing boards of the appropriate states for information about Marriage and Family Therapist, or Professional Counselor licensing outside of Nevada. The degree also prepares students for the pursuit of doctoral studies in practitioner-oriented programs such as counseling or clinical psychology.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Establish professional relationships with diverse clients that provide the necessary conditions for therapeutic change.
- Diagnose and assess categories of mental distress, psychopathology, and problems in living in diverse individuals, couples, families, and systems according to the current diagnostic systems.
- Demonstrate ability to develop strategies for successful and ethical psychotherapeutic interventions with diverse client groups in various clinical contexts, including crisis intervention and case management assessment.
- Develop detailed treatment plans for clients from diverse groups in various clinical contexts, including crisis intervention and case management assessment.
- Demonstrate knowledge of various models of psychotherapy, capacity to critically evaluate and assess their effectiveness, and execute psychotherapeutic interventions within diverse relationships.
- Apply clinical theory (including a resilience, recovery based model within the field of professional counseling on an emotional, cognitive, and interpersonal level.
- Demonstrate ability to research professional literature on clinical theory within the field of professional counseling on an emotional, cognitive, and interpersonal level.
- Demonstrate competency in the knowledge, skills, and abilities related to the application of professional ethics and values and relevant laws and legal codes to the professional roles and systems related to counseling practices.
- Demonstrate knowledge of various theories of personality development and ability to critically evaluate etiology and development of personality characteristics, noting relevant professional literature.
- Demonstrate understanding about the requirements of the field of professional counseling to include education, licensure, ethics, code of conduct, and professional association requirements.

Application Requirements

Students interested in enrolling in this program should contact the Henderson 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 applications 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 for class start dates.

Program Specifications

All students must complete the core courses and at least one specialization. Courses are scheduled on a limited basis. Students are encouraged to consult the regional faculty for the course sequence requirement. Enrollment in these courses is limited to MA Counseling Psychology students unless the course is specifically listed in another degree. These courses are scheduled on a limited basis.

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 10 hours of individual, marital, family, or group psychotherapy before taking the first Counseling Practicum course and another 15 hours before graduation for a total of 25 hours.

MAC students must obtain a total of 100 hours of counseling experience at a designated practicum site or school counseling program with an approved practicum site supervisor during each of the PSY 650A, B, & C, or PSY 651A, B, & C courses. During each of these courses, 75 hours must involve face-to-face counseling with clients.

MAC/NV-MFT and MAC/NV-LCPC Students must obtain a total of 100 hours of counseling experience at a designated practicum site with an approved practicum site supervisor during PSY 651A, B, C, & D. During each of these courses, 75 hours must involve face-to-face psychotherapy with clients.

MAC/NV-LCPC Students must obtain a total of 100 hours of counseling experience at a designated practicum site with an approved practicum site supervisor during PSY 651A, B, C, & D. During each of these courses, 75 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.

Nevada students seeking licensure must register with the Nevada Board of Examiners for Marriage and Family Therapists and Licensed Clinical Professional Counselors after graduation and fulfill all NV licensing requirements.

Students are also urged to join their respective professional association. Students in the NV-MFT and NV-LCPC specializations must obtain malpractice insurance, which may be obtained through their professional association another professional organization.

Students must complete all coursework within seven years. Any courses taken more than seven years ago must be repeated.

Degree Requirements

To receive the Master of Arts in Counseling Psychology, students must complete 8 courses for 36 quarter units in the core plus the number of credits listed below for their selected Area of Specialization. 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.

Master of Arts in Counseling Psychology Areas of Specialization

Non-Licensure Specialization (17 courses; 72 quarter units)

Nevada-Licensed Clinical Professional Counselor Specialization (18 courses; 70.5 quarter units)

Nevada-Marriage and Family Therapist Specialization (20 courses; 79.5 quarter units)

Program Prerequisite Recommended Preparation

(1 course; 4.5 quarter units)

PSY 429 Introduction to Personality Theory 4.5 (Prerequisite: Satisfactory completion of ENG 100, ENG 101, and PSY 100)

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

(8 courses; 36 quarter units)

PSY 601	Counseling Psychology Orientation
PSY 629	Lifespan Development
PSY 623	Diagnosis and Assessment
PSY 625	Counseling Techniques and Practices
PSY 636	Child/Adolescent Counseling
PSY 637	Culture in Counseling
PSY 628	Group Therapy
CHD 640	Treatment of Addictions

All students must select from one of the following Areas of Specialization:

Area of Specialization in Non-Licensure

(9 courses; 36 quarter units)

Area of Specialization Learning Outcomes

- Assist students in academic, personal, social, and career development.
- Possess knowledge, abilities, and skills necessary to plan, organize, implement, and evaluate a school counseling program

PSY 616	Counseling Theories
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- PSY 627A Legal and Ethical Issues
- PSY 654 Career and Lifestyle Development PSY 655 Psychopharmacology

Two of the following courses:

CED 613	Psycho-Educational Assessment
CED 606	Development and Evaluation

- PSY 617AFamily SystemsPSY 617BAdvanced Family Systems
(Prerequisite: PSY 617A)PSY 626Human Sexuality in PsychotherapyPSY 632AFamily TherapyPSY 632BCouples Therapy
- (Prerequisite: PSY 632A)
 PSY 642 Relational Violence

 (Recommended Preparation: MA Counseling Psychology Student Group)

 PSY 653 Research Critiques
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And three practicum courses

PSY 650A School Counseling Practicum I (3 quarter units) (Prerequisite: Regional Lead Faculty Approval)

- PSY 650B School Counseling Practicum II (3 quarter units) (Prerequisite: Regional Lead Faculty Approval)
- PSY 650C School Counseling Practicum III (3 quarter units) (Prerequisite: Regional Lead Faculty Approval) or
- PSY 651A Counseling Practicum I (3 quarter units) (Prerequisite: Regional Lead Faculty Approval)
- PSY 651B Counseling Practicum II (3 quarter units) (Prerequisite: Regional Lead Faculty Approval) PSY 651C Counseling Practicum III (3 quarter units)
- (Prerequisite: Regional Lead Faculty Approval)

Note: The practicum seminar meets once a week for 1.5 hours during three consecutive months in addition to the onsite practicum requirements. This seminar may meet in the late afternoon.

Area of Specialization in Clinical Professional

Counseling

(10 courses; 39 quarter units)

Specialization Learning Outcomes

- Provide professional counseling and mental health services, which include the application of clinical counseling theory and techniques to prevent and alleviate mental and emotional disorders and psychopathology, and to promote optimal mental health, rehabilitation, treatment, testing, assessment, and evaluation within the scope of practice for Licensed Clinical Professional Counselors
- Apply cognitive, affective, behavioral, systemic, and community counseling strategies within the scope of practice for Licensed Clinical Professional Counselors
- Possess knowledge of the principles of human development, counseling, wellness, and pathology required to practice in a variety of settings, including independent practice, community agencies, behavioral health care organizations, integrated delivery systems, hospitals, employee assistance programs, and substance abuse treatment centers.
- PSY 616 Counseling Theories
- PSY 627A Legal and Ethical Issues
- PSY 626 Human Sexuality in Psychotherapy
- PSY 654 Career and Lifestyle Development
- PSY 655 Psychopharmacology
- PSY 653 Research Critiques
- PSY 651A Counseling Practicum I (3 quarter units) (Prerequisite: Regional Lead Faculty Approval)
- PSY 651B Counseling Practicum II (3 quarter units) (Prerequisite: Regional Lead Faculty Approval)
- PSY 651C Counseling Practicum III (3 quarter units) (Prerequisite: Regional Lead Faculty Approval)
- PSY 651D Counseling Practicum IV (3 quarter units) (Prerequisite: Regional Lead Faculty Approval)

Area of Specialization in Marriage and Family Therapy

(Nevada)

(12 courses; 48 quarter units)

Specialization Learning Outcomes

- Provide professional counseling and mental health services, which include the application of clinical counseling theory and techniques, to individuals, couples, families, and groups wherein the interpersonal relationships are examined for the purpose of achieving more adequate, satisfying, and productive marriage and family adjustments
- Apply cognitive, affective, behavioral, systemic, and community counseling strategies to enable individuals to mature and grow within marriage and the family
- Possess knowledge of the principles of human development, counseling, wellness, and pathology required to practice in a

variety of settings, including independent practice, community agencies, behavioral health care organizations, integrated delivery systems, hospitals, employee assistance programs, and substance abuse treatment centers.

• Apply family systems theory, principles, and techniques to address and treat mental and emotional disorders

PSY 617A	Family Systems
PSY 617B	Advanced Family Systems
	(Prerequisite: PSY 617A)
PSY 626	Human Sexuality in Psychotherapy
PSY 627	Legal & Ethical Issues for MFT
PSY 632A	Family Therapy
PSY 632B	Couples Therapy
	(Prerequisite: PSY 632A)
PSY 642	Relational Violence
	(Recommended Preparation: MA Counseling Psychology
	Student Group)
PSY 653	Research Critiques
PSY 651A	Counseling Practicum I (3 quarter units)
	(Prerequisite: Regional Lead Faculty Approval)
PSY 651B	Counseling Practicum II (3 quarter units)
	(Prerequisite: Regional Lead Faculty Approval)
PSY 651C	Counseling Practicum III (3 quarter units)
	(Prerequisite: Regional Lead Faculty Approval)
PSY 651D	Counseling Practicum IV (3 quarter units)
	(Prerequisite: Regional Lead Faculty Approval)

(New Course Descriptions)

PSY 601: Counseling Psychology Orientat

An orientation to the MAC Program and introduction to the profession of psychotherapy. Issues in integration of personal and professional growth are a particular focus as is acquisition of skills needed for completion of required coursework. Students write an individualized learning plan to help guide their academic and practicum training.

PSY 616: Counseling Theories

Overview of major theories of counseling as they are applied to psychotherapy. Students are expected to acquire and practice knowledge and skills related to development of a good therapeutic relationship and the therapist's role in promoting communication, insight, and behavior change within the therapeutic setting.

PSY 617A: Family Systems

Part one of a two-part sequence. A comprehensive examination of the family as a social institution and how it shapes the course of human development. The student is exposed to models and systems of family development, the multifaceted dynamics of intrafamily relationships, and interactions of the family with various elements of the sociocultural environment. Attention is also focused on family interaction patterns, including communication processes, power relationships, and conflict resolution processes.

PSY 617B: Advanced Family Systems

(Prerequisite: PSY 617A)

Part two of a two-part sequence. Examines the various structures and roles of families, and explores what kinds of supports families need to optimize their successful functioning. Students increase efficacy in utilizing genograms as a clinical assessment and intervention tool in helping to strengthen families. Students examine cultural context in which relationship problems are understood and from which solutions emerge. Emphasis will be on creating, selecting, and applying appropriate intervention tools from across the micro-macro spectrum, including those developed in other parts of the world.

PSY 623: Diagnosis and Assessment

Explores the realm of mental illness from the perspectives of etiology, diagnosis, and assessment. 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.

PSY 625: Counseling Techniques and Prac

Overview of major theoretical concepts, techniques, and their applications the therapeutic setting. Emphasis is on basic interviewing, assessment, and counseling skills that facilitate the helping process through integration of various theoretical models.

PSY 627A: Legal and Ethical Issues

Examines the professional laws and ethics pertaining to the practice of counseling and psychotherapy, with an emphasis on the laws and ethics pertaining to the practice of professional counseling, the content of these legal and ethical codes, and the underlying principles involved.

PSY 629: Lifespan Development

An examination of developmental theories from childhood through old age as they relate to the practice of psychotherapy. Areas considered will include diversity, gender, and multi-cultural issues as well as identifying normative developmental transitions and their differentiation from deviant developmental pattern

PSY 650A: School Counseling Practicum I (3 quarter units)

(Prerequisite: Regional Lead Faculty approval)

Students are placed in a school setting ranging from elementary to high school and expected to perform a variety of counseling related activities for a minimum of 100 hours of supervised practice to be scheduled over a three month period. Students also participate in an academic seminar at the University. This three-month seminar may meet in the late afternoon outside of regular class hours Students must maintain a grade of satisfactory throughout the internship series. Grading is S or U only.

PSY 650B: School Counseling Practicum II (3 quarter units)

(Prerequisite: Regional Lead Faculty approval)

Students are placed in a school setting ranging from elementary to high school and expected to perform a variety of counseling related activities for a minimum of 100 hours of supervised practice to be scheduled over a three month period. Students also participate in an academic seminar at the University. This three-month seminar may meet in the late afternoon outside of regular class hours Students must maintain a grade of satisfactory throughout the internship series. Grading is S or U only.

PSY 650C: School Counseling Practicum III (3 quarter units)

(Prerequisite: Regional Lead Faculty approval)

Students are placed in a school setting ranging from elementary to high school and expected to perform a variety of counseling related activities for a minimum of 100 hours of supervised practice to be scheduled over a three month period. Students also participate in an academic seminar at the University. This three-month seminar may meet in the late afternoon outside of regular class hours Students must maintain a grade of satisfactory throughout the internship series. Grading is S or U only.

PSY 651A: Counseling Practicum I (3 quarter units)

(Prerequisite: Regional Lead Faculty approval)

Part one of a four part field practicum in which students work as counselor 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 100 hours of counseling experience that includes 75 hours of face-to-face work with clients during a three-month period. Regular course work continues during this period. The academic seminar meets one and one half 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. On-site psychotherapy and supervision hours may be used as partial fulfillment of required licensing hours. Grading is Satisfactory or Unsatisfactory only. This three-month seminar may meet in the late afternoon outside of regular class hours.

PSY 651B: Counseling Practicum II (3 quarter units)

(Prerequisite: Regional Lead Faculty approval)

Part two of a four part field practicum in which students work as counselor 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 100 hours of counseling experience that includes 75 hours of face-to-face work with clients during a three-month period. Regular course work continues during this period. The academic seminar meets one and one half 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. On-site psychotherapy and supervision hours may be used as partial fulfillment of required licensing hours. Grading is Satisfactory or Unsatisfactory only. This three-month seminar may meet in the late afternoon outside of regular class hours.

PSY 651C: Counseling Practicum III (3 quarter units)

(Prerequisite: Regional Lead Faculty approval)

Part three of a four part field practicum in which students work as counselor 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 100 hours of counseling experience that includes 75 hours of face-to-face work with clients during a three-month period. Regular course work continues during this period. The academic seminar meets one and one half 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. On-site psychotherapy and supervision hours may be used as partial fulfillment of required licensing hours. Grading is Satisfactory or Unsatisfactory only. This three-month seminar may meet in the late afternoon outside of regular class hours.

PSY 651D: Counseling Practicum IV (3 quarter units)

(Prerequisite: Regional Lead Faculty approval)

Part four of a four part field practicum in which students work as counselor 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 100 hours of counseling experience that includes 75 hours of face-to-face work with clients during a three-month period. Regular course work continues during this period. The academic seminar meets one and one half 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. On-site psychotherapy and supervision hours may be used as partial fulfillment of required licensing hours. Grading is Satisfactory or Unsatisfactory only. This three-month seminar may meet in the late afternoon outside of regular class hours.

PSY 654: Career and Lifestyle Development

Overview of career and lifespan development theories and skills, including how personal growth and life stages impacts individuals and society. Emphasis is on understanding career and job choices and personal strategies for career decision-making. Students become acquainted with print and electronic resources, counseling techniques, and assessment instruments.

Extended Learning

Program and Course Terminations

Paralegal Studies Program through Extended Learning Effective Leadership Workshops with Horses Business Exit and Succession Planning Professional and Life Enrichment Workshops (Franklin Covey) ETG 1983X Creating Web Pages II HSX 1913X Graphic Design

Course Revision

HSX 1912X Network+ Cert. Training \$1495

This nationally-recognized CompTIA Network+ online course and certification training program is the worldwide standard of competency for professionals with nine months experience in networking support or administration. The Network+ certification validates technical competency in networking administration and support.

Pricing Changes

HSX 1921X Search Engine Marketing \$1,895

HSX 1922X Pay Per Click Marketing \$1,495

HSX 1923X Search Engine Optimization \$1,495

HSX 1940X 3ds max \$1,695

New Information Technology Training Track

MS Windows Server 2008 Associate

This certificate program prepares you for the position of an Associate MS Windows 2008 Server Administrator. In this course, you will learn to install, configure and administer Windows 2008 Server, configure user accounts, Active Directory, group policy, Terminal Services, DHCP, WINS, NetBIO S. RIP and OSPF for IP routing. Install, configure and administer IIS.

Total cost \$4,390. 8 CEUs. IST 1869X MS Wdws 2008 Srvr Admin IST 1870X MS Wndws '08 Ntwk Infrstrctr I

New Self-Paced Online Course

TEDX 1888X Hrssmnt, Blyng & Cyber-Intmdtn 3 CEUs; \$265

Harassment, Bullying and Cyber Intimidation in School will discuss definitions and the personal, social, and legal ramifications associated with sexual harassment, bullying, and cyber-intimidation. We will then explore preventative strategies as well as how school staff can address these issues when they occur.

New Online Paraprofessional Programs Courses

HSCX 1911X: Grphc Dsgn w/ Photoshop CS3 \$1795

This online training course will teach students the two most important aspects of today's graphic design field: the fundamental principles of design, and Adobe Photoshop. Through hands-on exercises, we'll cover the concepts and theories that graphic designers depend on and how to put them into practice.

HSCX 1912X: Prfrmng Comp. Building Asmnts \$695

This online training course helps prepare students for BPI Building Analyst Certification and NATE HVAC Efficiency Analyst Certification (Senior Level). Both BPI and NATE recognition of continuing education (30 CEHs) applicable to recertification is pending. Students must obtain a score of 75% or higher to obtain CEH recognition.

HSCX 1913X: Biofuel Production Operations

\$2,595

This online course gives you the training needed to begin an exciting career in biofuel production. As a biofuel production operator, your job will be to ensure the quality and purity of the biofuel your plant produces. This involves inspecting and repairing equipment, operating computer systems, and handling lab equipment.

HSCX 1914X: Bldg Analyst: BPI BA Cert.

\$1,195

This Building Analyst Course was developed and written in partnership with nationally-recognized building science experts. The two BPI online training courses are full of scientific facts, interactive exercises, pictures, videos, graphics, and text. You'll also receive a study guide and a one year subscription to Home Energy Magazine.

HSCX 1915X: Cert. Green Supply Chain Prof. \$1,595

Gain the skills/knowledge you'll need to "green" an organization's supply chain with this Supply Chain Management Certification online training program. This course gives you the specialized knowledge to enable a company to achieve its environmental sustainability goals through global sourcing, material management, procurement/buying, transportation and logistics, and new product development.

HSCX 1916X: Cert. Indoor Air Quality Mngr

\$795

In this Certified Indoor Air Quality Manager online training and certification program, you'll learn how to respectfully, thoroughly, and expeditiously handle indoor air quality complaints. You will also learn how to diagnose, resolve and prevent IAQ problems. We'll help you establish a comprehensive IAQ plan specific to your buildings.

HSCX 1917X: Cert. Indoor Environmentalist \$895

This course teaches you the practical steps you should always follow in an indoor environmental assessment, covering how to take samples and how to resolve common IAQ problems. You'll learn about HVAC, building science, and all the major contaminants including their health effects.

HSCX 1918X: Natural Gas Plant Operations \$2,595

The Natural Gas Plant Operations online course provides the knowledge and skills you'll need to begin an exciting career in natural gas plant operations. To take this course no prior science or math education is necessary - the course includes all of the necessary basic science and technology elements.

HSCX 1919X: Snr Cert. Sustainability Prof.

\$2,495

This online training program will prepare you for a career as a leader in the green collar economy. After completing this certification program, you will establish yourself as a sustainable business professional ready to take responsibility for setting the direction and coordinating an enterprise's sustainability strategy across multiple functional areas.

HSCX 1920X: Wind Energy Apprentice \$2,195

Students will learn the basics of wind energy principles including wind technology, wind energy anatomy, wind farm design, wind business, and characteristics of energy sources. This course covers the fundamentals of hydraulics and basic theory and practice of electrical circuits, including calculations as applied to alternating and direct currents.

HSCX 1921X: MCAS: Office 07 & Wndws Vista \$1.895

This is the only comprehensive, performance-based certification program approved by Microsoft to validate business computer skills using Windows Vista and Microsoft Office® 2007 applications: Excel, Word, Power Point, and Outlook. Students will be prepared to pass the certification tests for the Vista operating system and each of the Office applications.

HSCX 1922X: Microsoft Office MASTER \$1.595

This program provides comprehensive, Microsoft-approved certification training exclusively for the Microsoft Office® 2007 applications: Excel, Word, Power Point, and Outlook. Students will be prepared to pass the certification tests for each of the Office applications.

HSCX 1923X: Admin Prof w/ MS Offce 07 Mstr \$1,995

This program combines Administrative Professional Career Training Program with our new Microsoft Office 2007 Master program to give students unmatched training as Administrative Professionals. In addition to teaching administrative skills, this program prepares students for Microsoft Certified Application Specialist (MCAS) Master certification.