Division of Health Sciences

The health issues facing our local, state, and national governments are complex, and the solutions will require research, innovation, and collaboration from individuals and agencies representing the full spectrum of health and wellness.

UNLV's Division of Health Sciences — along with other health science-related programs in the Nevada System of Higher Education — is addressing today's pressing needs and making tomorrow's discoveries.

The division is comprised of the schools of Dental Medicine, Nursing, Public Health and Allied Health. Guided by a mission that demands UNLV serves its community, the division is using research, education, training, and service to form unique public and private partnerships. These partnerships are helping provide quality health care to the underserved, educating future professionals, and exploring ways to improve the health and well-being our citizens. Taken together, UNLV is helping build a foundation for a healthier and more vibrant Nevada.

Division of Health Sciences Departments and Schools

School of Allied Health Sciences

- Health Physics & Diagnostic Sciences
- Kinesiology & Nutrition Sciences
- Physical Therapy

School of Nursing

School of Dental Medicine

School of Community Health Sciences

- Public Health M.P.H.
- Health Care Administration M.H.A.
- Health Promotion M.Ed. (Discontinued)
- Public Health Ph.D.

School of Allied Health Sciences

The School of Allied Health Sciences provides undergraduate and graduate education to students interested in studying one of the many different health sciences curriculums. The curricula are designed to prepare students to readily assume health-related employment opportunities or continue on with further graduate or professional studies. Educational experiences include rigorous classroom instruction, laboratory/clinical practice (on and off campus sites), research opportunities with faculty,

and professional mentoring. It is a goal of the School of Allied Health Sciences faculty to produce graduate students who are professionally competent, thoroughly capable of critical thinking, and highly sought after by employers. Graduates will exhibit high ethical professional standards, be devoted to lifelong learning and be prepared to respond to local, regional or national level demands in their fields of study.

Health Physics

The Department of Health Physics emphasizes the environmental aspects of radioactivity, safety, environmental issues associated with radioactive waste disposal, and the use of photodynamic therapy to treat cancer. Graduate Degree in Health Physics.

Kinesiology and Nutrition Sciences

Provides a program of study in the science of human movement for students interested in the allied health professions. The Department is committed to an interdisciplinary approach to professional preparation and scholarship. Graduate degrees in Kinesiology and Exercise Physiology.

Physical Therapy

Physical therapy is considered a specialty area in the health care field that is concentrates on the prevention of disability and the physical rehabilitation following injury or impairment. The goals of physical therapy are to help patients regain diminished physical function, which has been lost secondary to injury or disease, and to relieve pain. Doctor of Physical Therapy (DPT).

School of Allied Health Sciences

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Health Physics & Diagnostic Sciences

The Department of Health Physics emphasizes the environmental aspects of radioactivity, safety, environmental issues associated with radioactive waste disposal, and the use of photodynamic therapy to treat cancer. Graduate Degree in Health Physics.

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Health Physics & Diagnostic Sciences

Chair

Madsen, Steen (1997), Professor; B.S., University of Toronto; M.S.,

Ph.D., McMaster University.

Graduate Coordinator

Cerefice, Gary

(2009), Assistant Professor; B.S., University of Illinois; M.S., Ph.D., Massachusetts Institute of Technology.

Graduate Faculty

Hanson, Eric H.

(2010), B.S., Oregon State University; M.Ph., University Services University of the Health Sciences; M.D., Johns Hopkins University.

Hirschberg, Henry

(2006), B.E.E. City University New York; M.D., Ph.D., University of Oslo, Norway.

Kuang, Yu

(2012), Assistant Professor; B.M.E., M.S., Zhejiang University; Ph.D., Case Western Reserve University

Riland, Carson A.

(1996); B.S. Bloomsburg University; M.S., Ph.D. Texas A&M University.

Sudowe, Ralf

(2006), Associate Professor; Dipl.-Chem, Dr. rer. nat., Philipps Universitat Marburg, Germany.

Many industries, medical facilities, and research laboratories demand professionals who understand radiation hazards, their prevention and control. Prominent among scientists is the health physicist, who controls the beneficial use of ionizing radiation while protecting workers and the public from potential hazards. Our M.S. program provides students with instruction and research opportunities in the field of radiation protection with emphasis on environmental health physics, radioactive waste management, radiation dosimetry, medical physics, and medical health physics. The Department of Health Physics faculty looks forward to working with prospective students in this challenging program of study.

Health physics is the profession dedicated to the protection of the individual, the population, and the

environment from the potentially harmful effects of radiation. It incorporates the principles and technical skills from many disciplines including: physics, chemistry, biochemistry, biology, mathematics, and ecology. The wide spectrums of knowledge required of the health physicist make this profession both challenging and rewarding.

The Master of Science (M.S.) in Health Physics is designed to prepare students in the field of health physics to administer public and private radiation health programs; investigate medical uses of radioactivity; measure and control radiation in the workplace and the environment; ensure compliance with radiation protection regulations; assist in the cleanup of radioactive and hazardous waste sites; evaluate worker, patient, and public radiation doses; and conduct research in radiation protection.

The M.S. in Health Physics Program is accredited by the Commission on Accreditation of Medical Physics Educational Programs (CAMPEP) and the Accreditation Board for Engineering and Technology (ABET).

The Program Educational Objectives for the M.S. in Health Physics are as follows:

- Graduates will demonstrate competency in applying the theoretical and problem solving aspects of health physics and related disciplines.
- Graduates will demonstrate competency in the practical applications of health physics.
- Graduates will effectively communicate technical information in both oral and written form.
- Graduates will be competent in research methods and be able to critically review research with the intent of applying findings to their practice.
- Graduates will be prepared to pursue a lifetime of self-directed learning and professional development.
- Graduates will conduct themselves in a professional and ethical manner. Follow this link for more information about the Division of Health Sciences.

Program

• Health Physics M.S.

Health Physics M.S.

Admission Requirements

Applications for admission may be obtained by contacting the Department of Health Physics or the

Graduate College. Completed applications, official Graduate Record Examination (GRE) scores and one copy of official transcripts from all institutions attended after high school are submitted to the Graduate College. All other data (i.e., letters of recommendation and statement of professional goals) are submitted directly to the Department of Health Physics.

Students seeking admission to the graduate program in health physics must fulfill the following admission requirements:

- 1. Overall GPA of 3.00 (A=4.00 or equivalent) in undergraduate work. Applicants with a GPA below 3.00, but not less than 2.75, may be admitted as a graduate provisional student.
- Successful completion (grade of C or better) of the following course work: a. Sevensemester credits in biology including an introductory modern biology course and one higher level course b. Ten-semester credits in chemistry or geology including a general chemistry sequence and one higher-level course c. Eight-semester credits in elementary calculus (mathematics through differential equations is recommended) d. Twelve semester credits in physics including a general physics sequence e. A course in computer programming (an additional course in numerical methods or scientific computing is recommended) Applicants not meeting a limited number (maximum of nine credit hours) of prerequisite requirements may still be admitted to the program. However, prerequisite requirements may still be admitted to the program. However, prerequisite deficiencies must be completed during the first year of study and prior to registering for HPS 796 or 797.
- Completion of a baccalaureate degree in health physics, one of the basic sciences, or in a closely related scientific or engineering field. Applicants holding a degree in a nonrelated field may be given special consideration if they have completed all prerequisite course work.
- 4. Students seeking entry to the medical physics specialization must have a strong foundation in physics and, as such, applicants are required to have either an undergraduate degree in physics or a degree in a related engineering or physical science discipline with course work equivalent to a minor in physics (includes at least three upper level undergraduate physics courses).

- 5. A score ranking in the 50th percentile or higher on the verbal and quantitative sections of the Graduate Record Exam (GRE). Tests taken prior to August 2011 require a composite score of 1,000 or higher on the verbal and quantitative sections of the Graduate Record Exam (GRE).
- 6. Three letters of recommendation from former instructors or employers that speak to the applicant's potential as a graduate student. The individual writing the letter may use the form available from the Graduate College, which includes a release form for the student to sign.
- 7. A statement of approximately 300 words indicating the student's professional goals and reason for seeking graduate education.
- 8. International applicants whose native language is not English must show competency in the English language before they can be admitted. A satisfactory score (minimum 550 on the written or 213 on the computerized version) on the "Test of English as a Foreign Language" (TOEFL) or comparable evidence of competency in English must be submitted by students as part of their application.

Progression

To progress in the program students must:

- 1. Maintain a cumulative grade point average of 3.00 or above each semester enrolled.
- 2. Receive a grade of B (3.00) or above in all core health physics courses. If less than a B is earned, the course may be repeated. The student must be in good standing to repeat a course, and any core course may be repeated only once.
- 3. A student may register for a course only twice. A student who registered for the same core course twice and has received a grade less than B is ineligible for readmission unless unanimously approved by Health Physics Program graduate faculty.
- 4. Complete a minimum of six semester hours in each calendar year.
- 5. Pass the comprehensive oral examination.
- Continuously register for three credit hours of:HPS 797 - Thesis each semester while working on the thesis or professional paper until completion.

Advisement

The Health Physics Graduate Program Director will serve as academic advisor to all entering students for program planning. At the time the student selects his/her examination committee, the committee chairperson becomes the student's official advisor.

Graduation Requirements

Students in the M.S. in Health Physics Program must adhere to the following requirements for graduation:

- 1. Residency Credits. A minimum of 20 credits exclusive of thesis or special topic project must be earned at UNLV. A minimum of 15 credits must be accumulated within the School of Allied Health Sciences. Attendance at the University of Nevada, Reno does not interrupt, but does not contribute to, residency credits, because this institution is within the University and Community College System of Nevada.
- 2. Credit by Challenge Examination. Graduate courses in the Health Physics program may not be challenged for credit.
- 3. Six-year Completion Rule. All degree requirements must be completed within six calendar years from the date of matriculation. No credit may be used in an advanced degree program for course work completed more than six calendar years immediately preceding the term in which all degree requirements are completed.
- 4. Allotment of Credits. Students have a choice of catalog under which they wish to graduate a) the year of official matriculation or b) the year of graduation. Students are encouraged to meet the requirements of the current catalog.
- 5. A final oral examination will be held following completion of the thesis or professional paper resulting from a research project. The final examination must be held at least three weeks prior to the last day of instruction in the term in which the student plans to complete the degree requirements.

Degree Requirements

Requirements for the Master of Science in Health Physics include completion of 37 semester hours in required and elective graduate courses. These requirements will be established in consultation with the student's advisor in accordance with the Department of Health Physics and Graduate College policy and shall include:

1. Health Physics Core (21 credits):

HPS 602 - Radiation Detection

HPS 603 - Radiation Physics and Instrumentation Laboratory

HPS 701 - Applied Nuclear Physics

HPS 703 - Radiation Interactions and Transport

HPS 720 - Radiation Dosimetry

HPS 730 - Advanced Radiation Biology

HPS 791 - Graduate Seminar (three times)

2. Completion of thesis or professional paper (6 credits)

HPS 797 - Thesis

HPS 796 - Professional Paper

3a. Environmental Health Physics Core (4 credits):

HPS 718 - Radiochemistry Laboratory

HPS 719 - Introduction to Radioanalytical Chemistry

3b. Environmental Health Physics Electives (9 credits):

Graduate-level health physics or other approved graduate-level courses. These include: HPS 616 HPS 670 HPS 750 HPS 760

4. Medical Physics Core (12 credits)

HPS 740 - Medical Imaging Physics

HPS 740L - Diagnostic Medical Physics Clinical Rotation and Laboratory

HPS 742 - Radiation Therapy Physics

HPS 742L - Therapy Physics Clinical Rotation and Lab

HPS 795 - Independent Study

5. Comprehensive Examination: Comprehensive Examination: The comprehensive oral exam will be taken by all students after completion of the second semester of enrollment in the program. The exam will be pass/fail. Students who fail the exam may re-take the exam at the end of their third semester of enrollment. Students who fail their second attempt will be separated from the program. Students may not defend their thesis prospectus until successful completion of the oral exam. The exam will be administered by the graduate faculty from Health Physics.

Program of Study

Environmental Health Physics Option:

Semester 1: 10 Credits

HPS 701 - Applied Nuclear Physics

HPS 730 - Advanced Radiation Biology

HPS 791 - Graduate Seminar

Elective

Semester 2: 9 Credits

HPS 602 - Radiation Detection

HPS 603 - Radiation Physics and Instrumentation Laboratory

HPS 703 - Radiation Interactions and Transport

Semester 3: 11 Credits

HPS 718 - Radiochemistry Laboratory

HPS 719 - Introduction to Radioanalytical Chemistry

HPS 720 - Radiation Dosimetry

HPS 791 - Graduate Seminar

HPS 796 - Professional Paper

Semester 4: 10 Credits

HPS 791 - Graduate Seminar

Elective

Elective

Medical Physics Option:

Semester 1: 7 Credits

HPS 701 - Applied Nuclear Physics

HPS 730 - Advanced Radiation Biology

HPS 791 - Graduate Seminar

Semester 2: 12 Credits

HPS 602 - Radiation Detection

HPS 603 - Radiation Physics and Instrumentation

Laboratory

HPS 703 - Radiation Interactions and Transport

HPS 740 - Medical Imaging Physics

Semester 3: HPS 796 - Professional Paper 3 Credits

Semester 4: 7 Credits

HPS 720 - Radiation Dosimetry

HPS 742 - Radiation Therapy Physics

HPS 791 - Graduate Seminar

Semester 5: 11 Credits

HPS 740 - Medical Imaging Physics

HPS 742L - Therapy Physics Clinical Rotation and

HPS 791 - Graduate Seminar

HPS 795 - Independent Study

HPS 796 - Professional Paper

Course Descriptions

HPS 602 - Radiation Detection

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

HPS 603 - Radiation Physics and Instrumentation Laboratory

This course has been approved for graduate credit. A full description of this course may be found in the

Undergraduate Catalog under the corresponding 400 number.

HPS 616 - Advanced Health Physics

Credits 3

Solutions to problems pertaining to radiation safety in the environment, industry, medical facilities, and nuclear reactors. Topics include shielding, accelerators, radon, non-ionizing radiation, and radiation dose-effect. **Prerequisites**: HPS 300 and HPS 402, or equivalent.

HPS 670 - Environmental Health Physics

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

HPS 680 - Industrial Hygiene

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

HPS 701 - Applied Nuclear Physics

Credits 3

Atomic and nuclear structure; decay energetics and kinetics; interactions of radiation with matter; radiation protection standards; practical aspects of radiation protection; photon, neutron, beta and X-ray shielding; criticality; radiation protection at reactors, accelerators and medical facilities; radioactive material transportation regulations.

HPS 702 - Radiation Detection and Transport Credits 3

Detection of ionizing radiation, counting statistics, and radiation transport modeling. **Prerequisites**: HPS 701, STA 161 or 491, or consent of instructor.

Corequisite: HPS 718

HPS 703 - Radiation Interactions and Transport Credits 3

Decay energetics and kinetics; interactions of radiation with matter, radiation protection standards; practical aspects of radiation protection; photon, neutron, beta, and x-ray shielding, radioactive material transportation regulations, radiation transport. **Prerequisites**: HPS 701.

HPS 718 - Radiochemistry Laboratory Credits 3

Laboratory experiments in radiation detection, counting statistics and radiochemical separations are discussed. The operation and calibration of alphaand gamma-ray spectrometry equipment and liquid scintillation counters will be examined.
Radiochemical separation and analysis of
environmental samples are performed. Novel and
standard procedures for sample examination will be
covered. **Prerequisites**: Consent of instructor. **Corequisite**: HPS 602

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HPS 719 - Introduction to Radioanalytical Chemistry

Credits 1

Introduction to the principles and concepts of radioanalytical chemistry, such as the use of tracers, carriers and spikes and isotope dilution analysis. Sample preparation and techniques for radioanalytical separations and source preparation. Differences between macro chemistry and tracer chemistry. **Prerequisites**: HPS 602.

HPS 720 - Radiation Dosimetry

Credits 3

Mathematical treatment of the fundamental principles of internal and external radiation dosimetry. Pathway models and bioassay techniques studied to support the calculation of radiation dose from the intake of radioactivity. General external dosimetry from a variety of industrial and medical sources is addressed. **Prerequisites**: HPS 701 or consent of instructor.

HPS 730 - Advanced Radiation Biology Credits 3

Topics covered include: physics and chemistry of radiation absorption, cell survival curves, repair of radiation damage, radiation carcinogenesis, risk assessment models, cancer biology, model tumor systems, and dose fractionation in radiotherapy.

HPS 740 - Medical Imaging Physics

Credits 3

Conceptual, mathematical, and diagnostic aspects of commonly used clinical imaging modalities including film-screen radiography, computed tomography, magnetic resonance imaging, single photon emission computed tomography, positron emission tomography, and ultrasound. **Prerequisites**: HPS 701 or consent of instructor.

HPS 740L - Diagnostic Medical Physics Clinical Rotation and Laboratory

Credits 3

Covers the quality control and assurance aspects of commonly used clinical diagnostic modalities including film-screen and digital radiography, mammography, computed tomography, magnetic resonance imaging, single photon emission computed tomography (SPECT), and positron emission

tomography (PET). **Prerequisites**: HPS 701. **Corequisite**: HHPS 740 or consent of instructor.

HPS 742 - Radiation Therapy Physics

Credits 3

Use of ionizing and nonionizing radiation in radiation therapy to cause controlled biological effects in cancer patients. Emphasis on external treatment techniques using photon and electron beams, internal treatment techniques, and treatment planning.

Prerequisites: HPS 701 or consent of instructor.

HPS 742L - Therapy Physics Clinical Rotation and Lab

Credits 3

An introductory course dealing with the practical aspects of clinical therapeutic physics. Labs will be performed in a clinical setting and students will be introduced to the technology and procedures commonly encountered in a modern radiation therapy facility. **Prerequisites**: HPS 742.

HPS 750 - Radiation Risk Assessment

Credits 3

Descriptive and mathematical treatment of radionuclide transport, bioaccumulation, and human uptake. **Notes**: Risk analyses based on recent epidemiological studies reviewed. **Prerequisites**: HPS 670 or consent of instructor.

HPS 760 - Environmental Restoration and Radioactive Waste Management

Credits 3

Overview of the cleanup and management of radioactive and mixed wastes in the federal and private sector. Role of radiation protection personnel in radioactive waste management activities discussed. **Prerequisites**: HPS 701 or consent of instructor.

HPS 772 - Environmental Radiation Measurements

Credits 3

Laboratory sessions provide practical experience with techniques to evaluate the presence of radioactivity in environmental media. Topics include environmental radiation sources, environmental monitoring plans, sample collection and analysis, in-situ gamma- ay spectrometry, data interpretation and laboratory quality control. **Notes**: One hour lecture and three hours laboratory. **Prerequisites**: HPS 670 and HPS 718 or consent of instructor.

HPS 781 - Industrial Hygiene II

Credits 3

Overview of the major physical and biological hazards in the industrial environment emphasizing

recognition, monitoring technology, engineering control methodology, and best practice.

Prerequisites: HPS 680 or consent of instructor.

HPS 791 - Graduate Seminar

Credits 1

Overview of research methods, ethics, professional development, and technical communications related to health physics. Students prepare and give seminars on topics of interest in health physics. **Notes**: May be repeated for a maximum of three credits.

HPS 795 - Independent Study

Credits 1 - 3

Individual directed study of a topic in health physics not covered in depth in other courses. **Notes**: May be repeated to a maximum of six credits. **Prerequisites**: Graduate standing in health physics and consent of instructor.

HPS 796 - Professional Paper

Credits 3

Discussion of the components of a research proposal, writing a research proposal, and conducting pilot projects. **Notes**: May be repeated but only six credits applied to the student's program. **Grading**: S/F grading only. **Prerequisites**: HPS 620, HPS 701, graduate standing in health physics, and consent of instructor.

HPS 797 - Thesis

Credits 3

Notes: May be repeated but only six credits applied to the student's program. **Grading**: S/F grading only. **Prerequisites**: HPS 620, HPS 701, graduate standing in health physics, and consent of instructor.

Health Sciences

HSC 777 - Advanced Applied Statistics for the Health Sciences

Credits 3

Application of advanced statistical procedures to the investigation of research problems in the health science professions. Emphasis on a conceptual understanding of selected advanced statistical techniques with application to the investigation and analysis of problems in the health sciences area.

Prerequisites: Introductory course in statistics and introduction to research methodology course or consent of instructor.

Kinesiology & Nutrition Sciences

Chair

Young, John C. (1991), Professor; B.S.Ed., M.S., University of Michigan; Ph.D., University of Wisconsin, Madison.

Graduate Coordinator

Tandy, Richard D.

(1989), Associate Professor; B.S., Appalachian State University; M.S., Ph.D., Texas A&M University.

Graduate Admissions Coordinator

Wulf. Gabriele

(2001), Professor; Diploma, Ph.D., Deutsche Sporthochschule Koln; Ph.D., University of Munich.

Graduate Faculty

Dufek, Janet S.

(2002), Associate Research Professor, B.S. University of Wisconsin, Superior; M.S. Illinois State University; Ph.D. University of Oregon.

Golding, Lawrence A. (1976), Distinguished Professor; B.S., M.S., Ph.D., University of Illinois.

Guadagnoli, Mark A. (1991), Professor; B.S., M.S., Texas A&M University; Ph.D., Auburn University.

Holcomb, William R. (2001), Associate Professor; B.S. Berry College; M.S. U.S. Sports Academy; Ph.D. Auburn University.

Kruskall, Laura J.

(1999), Associate Professor; B.A. Mount Saint Mary College; M.S. Columbia University; Ph.D. Pennsylvania State University

Mangus, Brent C.

(1985), Associate Professor; B.S., Utah State University; M.S., University of Oregon; Ed.D., University of Utah.

Mercer, John (1999), Associate Professor; B.S., Buffalo State

College of New York; M.S., University of North Texas; Ph.D., University of Oregon.

Rubley, Mack (2001), Assistant Professor; B.S., University of Colorado; M.S., Pennsylvania State University; Ph.D., Brigham Young University.

Kinesiology is the study of human movement as it relates to human performance. The graduate degrees offered by the Department of Kinesiology and Nutrition Sciences are designed to prepare students for advanced study in biomedical sciences, clinical positions, and leadership positions in instituting physical fitness programs in public and private organizations. The department is committed to an interdisciplinary approach to professional preparation and scholarship and to creating an environment in which both basic and applied research in the field of kinesiology is stimulated. Comprehensive laboratories have been developed for the study of human performance, injury rehabilitation, and skill acquisition.

Students are afforded the opportunity to work closely with faculty in all areas of academics and research. The faculty are recognized internationally through their scholarship and research and are enthusiastically committed to graduate education.

Department of Kinesiology and Nutrition Sciences offers programs of study that lead to a Master of Science degree in Exercise Physiology or Kinesiology. These degree programs allow students a choice of preparation and opportunities to specialize in biomechanics, exercise physiology, motor learning/motor control and sports medicine. The goal of the graduate program in kinesiology is to provide students with the theory, knowledge, and skills necessary to apply the principles of human movement in a variety of community, research, clinical, or athletic settings, or to pursue advanced study at the doctoral level.

Programs

- Exercise Physiology M.S.
- Kinesiology M.S.
- Kinesiology Ph.D.

Exercise Physiology M.S.

The Master of Science in Exercise Physiology is designed to provide the student with an understanding of the physiological effects of exercise on the human body. The program also emphasizes the effect of regular exercise on adults and offers students experience in conducting physical fitness evaluations, and exercise testing. In addition, the graduate is prepared for entrance into a doctoral program in exercise physiology.

The program emphasizes academic preparation in exercise physiology, laboratory experience, knowledge of research methodology, and statistics. Students must complete a thesis in the general area of exercise physiology.

Admission Requirements

Students are admitted in the fall, spring, and summer semesters. Applicants for admission must have an undergraduate major in kinesiology, exercise science, physical education, athletic training, biology, nutrition, or a related academic discipline.

Applicants must have a minimum overall undergraduate grade point average of 2.75 (A=4.0), or 3.00 (A=4.0) in the last two years. The Graduate Record Examination must be taken prior to applying. Successful applicants generally have a 3.00 undergraduate grade point average and a combined score of 1000 on verbal and quantitative sections of the GRE and higher than 3.5 on the analytical section. Interested applicants must send the following information to the Graduate College:

- 1. A completed application for graduate studies.
- 2. Official transcripts of all colleges and universities attended.

Interested applicants must send the following information to the Department of Kinesiology:

- Copies of all transcripts sent to the Graduate College.
- 2. Official GRE scores.
- 3. A letter of intent that addresses: Reason(s) for wishing to earn an advanced degree. Motivation for attending UNLV. Summary of educational goals. Summary of research activities and interests. Possible faculty mentors.
- Two letters of recommendation from persons familiar with the applicant's academic record and potential for graduate study.

Degree Requirements

The Master of Science in Exercise Physiology requires a minimum of 33 credit hours. The curriculum for the M.S. in Exercise Physiology consists of the following courses:

Core Courses

- KIN 605 Sports Nutrition
- KIN 738 Human Physiology
- KIN 739 Evaluation of Physical Working Capacity

• KIN 740 - Advanced Exercise Physiology

Research Tools

Electives

- KIN 751 Selected Application of Statistical Techniques I
- KIN 750 Research Methods
- KIN 749 Thesis

Kinesiology M.S.

The Master of Science in Kinesiology is designed for students interested in the study of human performance. Students are provided with the theoretical foundations of the movement-based sciences and select an emphasis in biomechanics, motor learning/control, or sports medicine. Through involvement in directed research projects, students obtain an in-depth understanding of laboratory equipment research and applications in the biomedical sciences. Graduates are prepared to make applications of the movement sciences in research, clinical or athletic settings and for entrance into doctoral programs in kinesiology.

Admission Requirements

Students are admitted in the fall, spring, and summer semesters. Applicants for admission must have an undergraduate major in kinesiology, exercise science, physical education, athletic training, biology, nutrition, or a related academic discipline.

Applicants must have a minimum overall undergraduate grade point average of 2.75 (A=4.0), or 3.00 (A=4.0) in the last two years. The Graduate Record Examination (GRE) is not required for admission except in cases where the department requests it be taken. Successful applicants generally have a 3.00 undergraduate grade point average and a combined score of 1000 on verbal and quantitative sections of the GRE and higher than 3.5 on the analytical section. Interested applicants must send the following information to the Graduate College:

- 1. A completed application for graduate studies.
- Official transcripts of all colleges and universities attended.

Interested applicants must send the following information to the Department of Kinesiology:

1. Copies of all transcripts sent to the Graduate College.

- 2. Official GRE scores (when requested by the Kinesiology Department).
- A letter of intent that addresses: Reason(s) for wishing to earn an advanced degree. Motivation for attending UNLV. Summary of educational goals. Summary of research activities and interests. Possible faculty mentors.
- Two letters of recommendation from persons familiar with the applicant's academic record and potential for graduate study.

Degree Requirements

The Master of Science in Kinesiology requires a minimum of 33 credit hours. The curriculum for the M.S. in Kinesiology consists of the following:

Core Courses - Total Credits: 9 Students must complete one course from each of three areas: biomechanics, motor learning/motor control, exercise physiology.

Research Tools - Total Credits: 9

- KIN 750 Research Methods
- KIN 751 Selected Application of Statistical Techniques I

Specialization - Total Credits: 9
Research opportunities and course work are available in biomechanics, motor learning/motor control, and sports medicine. The individual student's program will be developed in consultation with the student's advisor.

Thesis Option - Total Credits: 9 Students electing to complete a thesis must complete KIN 749 and three credits of electives in consultation with their advisor.

Non-Thesis Option - Total Credits: 9 Students electing this option must complete KIN 748 and select six credits of electives.

Kinesiology Ph.D.

The Ph.D. program is designed specifically for professionals who desire tenure-track research, teaching, and administrative positions in postsecondary education. The Ph.D. program offers

academic concentrations in physical education teacher education, administration.

Admission Requirements

Admission to doctoral study in the Department of Sports Education Leadership will be granted to qualified applicants based on a combination of the following:

- 1. A master's degree from an accredited college or university
- 2. Official copies of all postsecondary transcripts
- 3. Professional vita or resume
- 4. Evidence of writing ability with appropriate examples including excerpt from a master's thesis, professional paper, or published article
- 5. Three letters of recommendation from previous instructors and/or professional colleagues attesting to the applicant's ability to complete doctoral study
- 6. A detailed statement explaining why the student desires admission to the program
- 7. A personal interview with the department graduate faculty. Interviews will be held in March.
- 8. Satisfactory GRE test scores (taken within five years from the date of application for admission)
- 9. TOEFL scores are required of international students with a preferred minimum of 550 for the written exam, 213 for the computerized exam, or 80 for the internet-based exam.

Admission Process

Applications for the Ph.D. program will be considered once per year and deadline for receipt of application is March 1. Application forms, fees, and official transcripts should be sent to the Graduate College online. Further admission information and application forms may be obtained from the UNLV Graduate College website http://graduatecollege.unlv.edu/admissions. letters of recommendation, professional resume or vita, GRE scores, official copies of all college transcripts, evidence of writing ability (e.g., excerpt from masters' thesis, professional paper or published article), a detailed statement explaining why the student desires admission, and a statement demonstrating evidence of professional/ educational compatibility with program goals should be submitted to the Department of Sports Education

Leadership, University of Nevada, Las Vegas, 4505 S. Maryland Parkway, Box 453031. As a final step in

the admission process, a personal interview with the graduate faculty will be conducted.

Degree Requirements

The Ph.D. in Sports Education Leadership will consist of a minimum of 66 credit hours beyond the master's degree to include the following areas: content knowledge (18); two 9 hour cognate areas (18); research methodology (15); and the culminating experience of prospectus (3) and dissertation (12). Individual programs of study may exceed minimum requirements and specific course work will vary depending on particular interest. Students must maintain a GPA of 3.00 or higher for all course work taken at the doctoral level.

Scholarly Product Requirement

Each student must satisfy a scholarly product requirement. This requirement can be met in one of two ways:

- 1. Students may submit a research study to a refereed journal for publication.
- Students may submit a proposal for presentation of research at an annual conference of a national organization.

Student Advisory Committees

Students are required to select a graduate advisory committee before completing 16 hours or by the sixth week for the first semester of admission if 12+ hours, taken prior to admission, is considered part of the degree program. Advisory committees must consist of three Sports Education Leadership graduate faculty members (one of which can be an associate graduate faculty member) and a graduate college representative from outside of the department. The chair of the advisory committee must be a graduate faculty member in the Department of Sports Education Leadership. Advisory committees should be informed prior to the student's completion of 16 credit hours. The committee oversees the student's progress, including the comprehensive exams. A temporary advisor is assigned until the student becomes acquainted with the faculty and selects his/her advisory committee.

Comprehensive Examination

The student takes the comprehensive examination during the semester immediately preceding enrollment in dissertation. The comprehensive examination consists of six questions in which the student is allotted two hours per question. Questions are constructed and scored by the student's advisory committee. Students must file intent to take

comprehensive examinations, adhering to timelines cited for other graduate programs scheduled by the Graduate College and the Department of Sports Education Leadership. Students may petition the Sports Education Leadership Graduate Faculty for permission to take comprehensive examinations pending approval of the advisory committee.

The questions on the comprehensive examination address elements of content knowledge, research methodology, and related discipline electives. The student's advisory committee provides general parameters from which questions are selected. "Takehome" examinations, in whole or in part, are not allowed. Students may use college provided technology for word-processing. Grading consists of two categories: Pass and Fail.

Upon receiving a passing grade for the written comprehensive examination, students will be required to pass an oral examination by their respective advisory committees. Students must successfully complete the written and oral comprehensive examinations before enrolling in dissertation hours.

Dissertation Proposal and Defense

Following the successful completion of the written and oral comprehensive examinations, the student must submit a dissertation proposal to the Doctoral Advisory Committee and submit the accompanying "Dissertation Prospectus Approval" form from the Graduate College. The Doctoral Advisory Committee will determine the acceptability of the prospectus.

Upon approval of the prospectus, the student must obtain approval for the study from the Institutional Review Board for the Protection of Human Subjects.

Upon completion of the dissertation, a defense will be scheduled and conducted in accordance with the Graduate College's policy for dissertation completion. Students should obtain *The Graduate Study Guide and the Guide to Preparing and Submitting a Thesis or Dissertation* from the Graduate College web site.

It is the student's responsibility to file all required paperwork (Dissertation Prospectus Approval, Appointment of Advisory Committee, Proposed Degree Program, etc.) to the Graduate College in a timely manner.

Course Descriptions

Clinical Laboratory Sciences

CLS 612 - Clinical Immunology

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

CLS 613 - Clinical Immunology Laboratory

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

CLS 614 - Transfusion - Immunohematology

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

CLS 615 - Transfusion Medicine Immunohematology Laboratory

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

CLS 622 - Clinical Hematology I

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

CLS 623 - Clinical Hematology Laboratory I

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

CLS 624 - Clinical Hematology II

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

CLS 625 - Clinical Hematology Laboratory II

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

CLS 632 - Clinical Microbiology I

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

CLS 633 - Clinical Microbiology Laboratory I

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

CLS 634 - Clinical Microbiology II

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

CLS 635 - Clinical Microbiology Laboratory II

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

CLS 642 - Clinical Chemistry I

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

CLS 643 - Clinical Chemistry I Laboratory

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

CLS 644 - Clinical Chemistry II

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

CLS 645 - Clinical Chemistry II Laboratory

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

CLS 653 - Seminar in CLS IV

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

CLS 681 - Clinical Practicum in Hematology

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

CLS 682 - Clinical Practicum in Chemistry

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

CLS 683 - Clinical Practicum in Immunohematology

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

CLS 684 - Clinical Practicum in Microbiology

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

CLS 685 - Advanced Clinical Practicum

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

Kinesiology

KIN 601 - History of Exercise and Sport Science

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

KIN 605 - Sports Nutrition

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

KIN 614 - Enhancing Mental and Motor Abilities

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

KIN 615 - Introduction to Forensic Kinesiology

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

KIN 656 - Biomechanics of Endurance Performance

Credits 3

The primary objective of this course is to provide a study of endurance performance from a biomechanical perspective. At the conclusion of the course, the student will be able to apply biomechanical terminology to understand factors that influence endurance swimming, biking, and running performance, for example.

KIN 657 - Physiology of Endurance Performance Credits 3

The primary objective of this course is to provide a study of endurance performance from an exercise physiology perspective. At the conclusion of the course, the student will be able to demonstrate an understanding of physiological factors that influence endurance swimming, biking, and running performance, for example.

KIN 685 - Physical Activity and the Law

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

KIN 691 - Exercise Physiology

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

KIN 692 - Clinical Exercise Physiology

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

KIN 695 - Sports Medicine

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

KIN 700 - Special Problems in Kinesiology

Credits 1 – 6

Specialized instruction and/or research designed to develop depth in understanding a current kinesiology problem. **Notes**: May be repeated to a maximum of six credits. **Prerequisites**: Consent of instructor.

KIN 730 - Organization and Administration of Athletic Training

Credits 3

Develop and utilize organization and administrative theories and philosophies in managing facilities, coworkers and students in a variety of athletic settings.

KIN 731 - Orthopedic Assessment in Sports Medicine

Credits 3

Theory and methods of orthopedic assessment as they

relate to the understanding, evaluation, treatment, and rehabilitation of sport injuries. Emphasis on advanced understanding of the theoretical applications of advanced assessment techniques for orthopedic injuries. **Prerequisites**: Consent of instructor.

KIN 733 - Psychological Aspects of Sport and Rehabilitation

Credits 3

Overview of theoretical concepts and techniques in sport psychology. Emphasis on the application of psychology to human movement, skilled athletic performance, and injury rehabilitation.

KIN 734 - Therapeutic Intervention in Sports Medicine

Credits 3

Theoretical background in the application of therapeutic intervention in a practical setting.

KIN 735 - Sports Medicine Rehabilitation Principles and Practices

Credits 3

Provides opportunity to study theory and techniques of various exercise rehabilitation processes and apply these processes on a case study basis. **Prerequisites**: Graduate standing and consent of instructor.

KIN 736 - Biomechanical Applications in Kinesiology

Credits 3

Provides opportunity to learn mechanical principles underlying human movement and apply these skills in a laboratory situation. **Prerequisites**: Graduate standing and consent of instructor.

KIN 737 - Biomechanics of Strength

Credits 3

Interdisciplinary examination of concepts and principles involved in strength development and force production. Includes study of neurological, physiological and mechanical factors affecting force/tension/power generation, and biomechanical interactions with external loads and various resistance training equipment. **Prerequisites**: Graduate standing or consent of instructor.

KIN 738 - Human Physiology

Credits 3

Study of mechanisms which regulate physiological systems and the way regulation functions to maintain homeostasis. Emphasis on those systems involved in the integrated response to exercise. **Prerequisites**: Consent of instructor, undergraduate course in anatomy and physiology.

KIN 739 - Evaluation of Physical Working Capacity

Credits 3

Concepts and methodology in the measurement of energy metabolism in humans. Examination of the various methods used to measure physical working capacity with the treadmill and ergometry. Understanding of basic electrophysiology of myocardium and pulmonary function measurements. **Prerequisites**: Consent of instructor.

KIN 740 - Advanced Exercise Physiology Credits 3

Lecture, discussion, and laboratory experiences dealing with impact of acute and chronic exercise on several systems. Selected topics such as nutrition and exercise, weight control, physical working capacity, and body composition. **Prerequisites**: KIN 739

KIN 743 - Research Techniques in Biomechanics Credits 3

Examination of some of the techniques used in biomechanical research for data collection, analysis, and presentation. Emphasis on developing an understanding of experimental techniques, their capabilities and limitations. The lecture/discussion/lab sessions provide a historical and theoretical basis for each of the techniques examined. **Prerequisites**: Graduate standing or consent of instructor.

KIN 744 - Thermoregulation During Physical Work

Credits 3

Emphasizes physical mechanisms of heat transfer and their physiological control: relationship among body temperatures, sweat rate, exercise loads, environmental temperature, and heat stress.

Prerequisites: KIN 739 and consent of instructor.

KIN 745 - Human Energy Metabolism

Credits 3

Study of the interactions between nutrition, energy metabolism, and physical exercise. Emphasis on how the body assimilates, stores, and makes available food energy to power muscular work. **Prerequisites**: KIN 739 or consent of instructor.

KIN 747 - Graduate Seminar

Credits 1

Oral presentations of proposed and completed research by graduate students, graduate faculty, and guests. **Notes**: May be taken for credit to a maximum of four credits.

KIN 748 - Professional Paper

Credits 1 – 6

May be repeated but only three credits will be applied to the student's program. **Notes**: May be repeated but only two credits will be applied to the student's program. **Grading**: S/F grading only.

KIN 749 - Thesis

Credits 3-6

Notes: May be repeated but only six credits will be applied to the student's program. **Grading**: S/F grading only.

KIN 750 - Research Methods

Credits 3

Overview of techniques used in historical, descriptive, and experimental research such as those found in exercise science, health, physical education, and recreation research publications. Procedures for formulating a research proposal; hypothesis testing; experimental designs and statistical applications.

KIN 751 - Selected Application of Statistical Techniques I

Credits 3

Introduction to descriptive and inferential statistical procedures utilized in studies reported in exercise science, health, physical education, and recreation. **Prerequisites**: KIN 750

KIN 752 - Selected Application of Statistical Techniques II

Credits 3

Statistical analysis techniques including correlation and regression, anova, multivariate analysis, manova for repeated measures designs. Introduction to selected statistical software packages; computeraided graphics and data presentation techniques. **Prerequisites**: KIN 751 or consent of instructor.

KIN 755 - Research on Physical Activity Behavior Credits 3

Students review the scholarly literature pertaining to physical activity behavior. Papers with special implications for building a general knowledge base requisite to the conduct of research on physical activity behavior are read, discussed, and critically analyzed.

$KIN\ 762$ - Motor Learning Applications

Credits 3

Designed to explain basic concepts of motor learning involved in organizing and scheduling practice for efficient learning/teaching of motor skills. Includes discussions of memory, feedback, stages of learning, and other motor learning principles.

KIN 775 - Internship in Athletic Administration Credits 3

The internship in Athletics is a culminating experience that provides an opportunity to apply knowledge and skills learned in the academic program while working within an athletic administration or related organization. Students will work under the direction of a supervisor in an area related to their selected interest for future employment. **Notes**: May be repeated to a maximum of six credits.

KIN 788 - Independent Study

Credits 1-3

Independent Study

KIN 796 - Supervised Practice: Community Nutrition

Credits 2

For Students accepted into the Department of Nutrition Sciences Dietetic Internship. Students gain intensive experiences covering all aspects of community nutrition programming. Students will observe the diversity within community nutrition in terms of mission, target audience and programs and will actively participate in nutrition program development, implementation, evaluation, and marketing. **Corequisite**: KIN 797 and KIN 798.

KIN 797 - Supervised Practice: Food Service Management

Credits 2

For students accepted into the Department of Nutrition Sciences Dietetic Internship. Students will gain experience in managing the diet office, tray line production and supervision, food service production, cafeteria management, and catering. **Corequisite**: KIN 796 and KIN 798.

KIN 798 - Supervised Practice: Clinical Nutrition and Dietetics

Credits 2

For students accepted into the Department of Nutrition Sciences Dietetic Internship. Students will gain the skills required to screen and assess individual patients, interpret laboratory values, develop and implement appropriate care plans, complete appropriate diet instructions, and document all assessment and plan information in correct medical chart format. **Corequisite**: KIN 797 and KIN 798.

KIN 799 - Dissertation

Credits 1 - 12

Culminating research analysis and writing toward completion of dissertation and subsequent defense.

Physical Therapy

Chair

Wallmann, Harvey (1997), Associate Professor; B.A., M.S., Purdue University; M.S., University of Indianapolis; DSc, Loma Linda University.

Graduate Coordinator

Puentedura, E. Louie (2007), Assistant Professor; B.S. and G.D.M.T., Lincoln Institute of Health Sciences, La Trobe University, Australia; D.P.T., Northern Arizona University.

Graduate Faculty

Hickman, Robbin

(2007), Assistant Professor; B.S., California State University, Long Beach; M.H.S., University of Indianapolis; D.Sc., Rock Mountain University of Health Professionals.

Landers, Merrill

(2001), Associate Professor; B.S., Brigham Young University; DPT, Creighton University.

Schuerman, Sue

(2006), Assistant Professor; B.S., University of Nebraska; M.B.A., University of Massachusetts, Ph.D., University of Nebraska.

Young, Danny

(2007), Assistant Professor; B.S., Southern Utah University; D.P.T., Creighton University.

The Department of Physical Therapy offers a graduate program leading to a Doctor of Physical Therapy (DPT) degree. The program is designed to prepare students to plan and administer treatment to help patients regain diminished physical function lost secondary to injury or disease, to promote soft tissue healing, and to relieve pain. By determining the degree of impairment, physical therapists are then able to help patients return to full function by using various physical agents such as electrical stimulation, heat, and cold to decrease pain and by using therapeutic exercises to increase strength, endurance, and coordination.

The purpose of the Department of Physical Therapy is to provide students pursuing a career in physical therapy the opportunity to acquire the knowledge and skills required for the safe practice of physical therapy. Students are prepared as generalists, but also

have some opportunity to investigate specialized aspects of physical therapy through numerous clinical exposures. The program of study consists of approximately 111 credit hours of graduate course work and consists of intense academic and clinical work spread over six semesters and three summers. These hours are divided between classroom, clinical and research activities.

The DPT is an entry-level professional program designed to provide individuals with appropriate baccalaureate degrees the knowledge and skills to develop clinical and research expertise in the provision of physical therapy. Upon receiving this degree, students will be eligible to sit for the licensure examination in physical therapy.

The mission of the UNLV Department of Physical Therapy is to develop competent, caring and autonomous practitioners who will serve the health care needs of the State of Nevada and the profession and who are doctorally prepared to engage in critical thinking, evidence-based practice, life-long learning, and service in a variety of health care settings, including rural and under-served areas.

Program

• Physical Therapy D.P.T.

Physical Therapy D.P.T.

Admission Requirements

Admission to the program is limited to 30 available spaces per class. Students enrolling in any class in the Department of Physical Therapy must be admitted (graduate standing only, no graduate provisional standing accepted) to the program in the Summer semester of each year. Since enrollment is limited in the Physical Therapy program, satisfactory completion of prerequisite courses does not assure an applicant of admission. No student may take any class as a "Nondegree Seeking" student. Admissions criteria are reviewed by the faculty annually and are subject to change.

Prior to application to the program, the individual is advised to fully explore the nature of the profession of physical therapy. Students are expected to volunteer in or visit various physical therapy facilities in order to gain a broad view of the roles and responsibilities of a physical therapist. As part of the interview process, students will be assessed on their knowledge of the scope of the profession of physical therapy.

The application deadline is December 15 preceding the June in which admission is desired. After applications are received, they are reviewed regarding the minimum requirements, i.e., baccalaureate degree, GPAs, etc. Only the leading candidates will be invited for interviews during the Spring semester, which are based on satisfactory completion of the admission requirements.

The following requirements are considered for admission into the Doctor of Physical Therapy program:

- 1. Prior to entering the program, candidates must complete prerequisite courses and earn a baccalaureate degree from an accredited college or university. There is no preference given to any particular baccalaureate degree.
- 2. A minimum overall undergraduate grade point average of 2.75 on a 4.0 scale with a minimum average of 3.0 on a 4.0 scale for prerequisite courses.
- 3. A composite score of 1000 or higher on the verbal and quantitative sections of the Graduate Record Examination (GRE) is preferred. A score of 4 out of 6 is recommended on the Analytical Writing Section of the GRE.
- 4. Students must apply to the DPT program via the new Physical Therapy Centralized Application Service (PTCAS). Only applications from PTCAS will be considered. Please use the URL www.ptcas.org to complete your application.

The following are required with your application to PTCAS:

- A. Three letters of recommendation. Two of the letters need to be from a licensed physical therapist who can evaluate the applicant's potential as a student in the physical therapy program. The remaining letter can be from a former professor or employer.
- B. An autobiographical statement of approximately 300 words describing the student's professional goals and reasons for seeking graduate education in physical therapy.
- C. Knowledge of the field through actual work or volunteer experience (a minimum of 100 hours or more divided among hospital and outpatient facilities). Additional hours in diversified settings are strongly recommended.
- 5. An interview may be required.

Information to be submitted to the Graduate College:

1. Application forms are available on the Graduate College website, with appropriate fees.

- 2. Official transcripts from all previous college and professional schools.
- 3. Official scores from the Graduate Record Examination (GRE).

The program is open to qualified applicants without regard to race, color, religion, sex, sexual orientation, age, national origin, marital status, or the presents of any physical, sensory, or mental disability.

Prerequisite Courses

In addition to completing the requirements of a baccalaureate degree, applicants must have completed or be able to complete the necessary specific hours of prerequisite course work with a grade of at least a C prior to admission to the program. Grades below a C in prerequisite courses will not be accepted. No more than two prerequisite science courses should be in progress or incomplete and all prerequisite science courses must be completed by the end of the spring semester (quarter) prior to commencing the program. Those students in the process of fulfilling the requirements of a prerequisite course must realize that their acceptance into the program is contingent upon satisfactory completion of that course during the application process.

Courses taken on a pass-fail basis may not fulfill prerequisite requirements. Individuals submitting prerequisite course work completed prior to 1995 should contact the Physical Therapy Department Office to determine if the course work is appropriate to fulfill prerequisite course requirements, which are as follows:

- 1. One year of lecture-based biology courses
- 2. One year of laboratory and lecture-based anatomy and physiology courses
- 3. One year of laboratory and lecture-based inorganic chemistry
- 4. One year of laboratory and lecture-based physics
- One year psychology (introduction to psychology and one semester of either child, adolescent, developmental or abnormal psychology)
- 6. One semester statistics

Advisement

All entering students will be assigned a specific faculty member for advisement.

Policies and Procedures

Policies and procedures for didactic and clinical work regarding course grades, probation, separation, and reapplication are detailed in the Department of Physical Therapy Student Manual and Clinical Education Manual.

Progression

To progress in the Physical Therapy Program students must adhere to the following guidelines:

- 1. Maintain a cumulative grade point average of 3.00 or above each semester enrolled.
- 2. Receive a grade of B- or above in all required physical therapy courses. Students who do not maintain a 3.00 average or who receive any grade less than a B- in any course at the end of the semester will be notified in writing and placed on probation at that time. A second grade of C+ or lower received in any course in the ensuing semester or failure to restore the cumulative average to 3.00 or above during the ensuing semester will bring about separation from the program. The student's status in the program will be determined the Chair/Director on the recommendation of the Academic Review Committee (ARC) regarding the student's separation or action plan for remediation.
- 3. The student will not progress in the program if any of the following occur:
 - a. An earned F in any didactic course. This results in immediate separation without the option for reapplication.
 - b. Failure of a third attempt of any clinical competency check-off with the exception of the final practical exam.
 - c. A failure of a final practical exam (different than the competency check-off).
 - d. A grade of C+ or below in more than one course in any semester.
 - e. Inability to rectify probationary status within the time frame allotted by the ARC.
 - f. A student on probation whose actions warrant probation in another category (academic, professional behavior, clinical) may also be separated.
- 4. A student may register for a Supervised Clinical Education course only two times if the option to reapply is approved by the ARC and a recommendation is made to the department chair/director. This option is only available to students who have failed a clinical rotation and have been separated from the program. This option is not

- available to students failing didactic course work. A student who is registered for the same course twice and has withdrawn or received a Fail is ineligible for readmission unless otherwise approved by the ARC, Department Chair, and Graduate Dean.
- The students must follow the proposed curriculum in the specified time frames unless otherwise approved by the ARC, Department Chair, and Graduate Dean.

Objectives

- 1. To prepare students to be the purveyors of physical therapy practice through clinical excellence, critical thinking, scientific inquiry, and social responsibility.
- 2. To prepare students to differentially diagnose enabling them to establish an appropriate plan of care and provide referral as necessary.
- 3. To prepare graduates who will be able to work autonomously in a wide variety of settings and roles as practitioners, clinical educators and researchers, supervisors, administrators and consultants.
- 4. To prepare students to adapt to changes in health care and society and be prepared to work in challenging environments with elderly, rural, and underserved populations.
- 5. To educate students in the design and implementation of culturally competent health care.
- To develop scientific practitioners, who are able to demonstrate the ability to critically analyze literature, utilize evidence-based integrated treatment approaches, and value clinical based research.
- 7. To prepare graduates to educate and encourage patients to achieve functional independence so they may have an improved quality of life and become more productive members of society.
- 8. To prepare graduates who will be able to organize and promote health awareness, wellness, and prevention education, and reintegrate populations with special needs into the community throughout-reach programs.
- 9. To prepare graduates to assume a leadership role in addressing critical issues that affect clinical practice, education, research, and public policy.
- 10. To prepare graduates to be committed to a lifetime of self-directed learning, professional development, integrity,

- community involvement, and to exemplify professional and personal ethics and values.
- 11. To prepare graduates to demonstrate understanding of medico-legal issues in physical therapy practice through active involvement in professional organization.
- 12. To educate students on the benefits of working interdependently with other health care professionals using a team approach to patient care.

Graduation Requirements

Students in the Physical Therapy program must adhere to the following requirements for graduation:

- 1. Satisfactory completion of the Physical Therapy program curriculum including the required period of clinical education with a grade point average of 3.00 or higher on a scale of 4.00.
- Credit by Challenge Examination. Graduate courses in the Department of Physical Therapy may not be challenged for credit.
- 3. The program must be completed within six years from the date of matriculation. The chair/director will evaluate potential exceptions.
- 4. In addition to the course requirements, the student must satisfactorily prepare a written document and oral presentation of a final research project, professional paper, or case report. The presentation will satisfy the requirements for a final capstone experience and will be open to the public.
- 5. Students must be in good standing with the Department of Physical Therapy and cannot be on a probations status at the time of graduation. Policies related to student probation, separation, and academic progress as stated in the current physical Therapy Student Manual are in compliance with the Graduate College.

Degree Requirements

Entry-Level Doctor of Physical Therapy Degree Curriculum - Total Credits: 111

Beginning with the class of 2011, the curriculum will be modified to reflect faculty and student concerns based upon program assessment. These changes will take place throughout the next year.

Summer Semester 1st Year (Both Sessions) - Total Credits: 9

DPT 710 - Selected Topics in Physical Therapy - 1 credit

DPT 711 - Medical Terminology - 1 credit

DPT 726 - Evidenced-Based Practice in Physical

Therapy I - 1 credit

DPT 744 - Gross Anatomy I - 2 credits

DPT 744L - Gross Human Anatomy Lab I -1 credit*

DPT 745 - Gross Anatomy II - 2 credits

DPT 745L - Gross Human Anatomy Lab II -1 credit*

Fall Semester 1st Year - Total Credits: 19

DPT 730 - Foundations of Observation and

Assessment - 2 credits

DPT 730L - Foundations of Observation and

Assessment - 2 credits*

DPT 741 - Orthopaedic Principles - 3 credits*

DPT 742 - Clinical and Pathological Physiology - 5 credits

DPT 746 - Neuroanatomy - 3 credits

DPT 746L - Neuroanatomy Lab - 1 credit

DPT 749 - Applied Exercise Physiology - 2 credits

DPT 749L Applied Exercise Physiology Lab - 1 credit

Spring Semester 1st Year - Total Credits: 19

DPT 732 - Therapeutic Exercise - 2 credits

DPT 732L - Therapeutic Exercise - 1 credit

DPT 735 - Functional Training and Acute Care - 2 credits

DPT 735L - Functional Training and Acute Care Lab - 1 credit

DPT 748 - Pharmacology - 2 credits

DPT 754 - Orthopaedic Assessment in Physical

Therapy - 4 credits

DPT 756 - Neurophysiology - 4 credits

DPT 790 - Clinical Research in Physical Therapy - 3 credits

Summer Semester 2nd Year (Both Sessions) - Total Credits: 7

DPT 721 - Advanced Topics in Physical Therapy - 1 credit

DPT 752 - Physical Agents and Electrophysiology - 2 credits

DPT 752L - Physical Agents and Electrophysiology Lab - 1 credits*

DPT 761 - Supervised Clinical Education I - 3 credit*

Fall Semester 2nd Year - Total Credits: 16

DPT 720 - Professional Development - 2 credits

DPT 757 - Wound Care - 2 credits*

DPT 770 - Cardiopulmonary Rehabilitation - 1 credit

DPT 770L - Cardiopulmonary Rehabilitation Lab - 1 credit

DPT 785 - Orthopaedic Rehabilitation - 2 credits

DPT 785L - Orthopaedic Rehabilitation Lab - 1 credit

DPT 786 - Neurological Rehabilitation - 3 credits

DPT 786L - Neurologic Rehabilitation Laboratory Experience - 1 credit

DPT 791 - Applied Research Statistics - 3 credits*

Spring Semester 2nd Year - Total Credits: 16

DPT 727 - Evidence-Based Practice in Physical Therapy II - 1 credit

DPT 747 - Geriatric Examination and Intervention - 1 credit

DPT 750 - Prosthetics and Orthotics - 2 credits

DPT 750L - Prosthetics and Orthotics - 1 credit

DPT 755 - Geriatric and Pediatric Rehabilitation - 2 credits

DPT 755L - Geriatric and Pediatric Rehabilitation - 1 credit

DPT 758 - Diagnostic Testing and Imaging - 2 credits

DPT 787 - Integrated Rehabilitation - 2 credits

DPT 787L - Integrated Rehabilitation Lab - 1 credit

DPT 788 - Spine Examination and Treatment - 2 credits

DPT 788L - Spine Examination and Intervention Lab - 1 credit

Summer Semester 3rd Year (Both Sessions) - Total Credits: 6

DPT 751 - Women's Health in Physical Therapy - 2 credits

DPT 772 - Physical Therapy Administration - 2 credits

DPT 774 - Psychosocial Aspects of Physical Therapy - 2 credits

Fall Semester 3rd Year - Total Credits: 10

DPT 762 - Supervised Clinical Education II - 5 credits*

DPT 763 - Supervised Clinical Education III - 5 credits*

Spring Semester 3rd Year - Total Credits: 9

DPT 764 - Supervised Clinical Education IV - 6 credits*

DPT 798 - Directed Research - 3 credits * Course fee

Course Descriptions

Doctor of Physical Therapy DPT 710 - Selected Topics in Physical Therapy

Credits 1

Forum to disseminate information to students on current and professional issues in physical therapy. **Prerequisites**: Graduate standing in physical therapy.

DPT 711 - Medical Terminology

Credits 1

Introduction to medical terminology for the healthcare professional. Students expand their medical vocabulary via immersion in medical content and subjects from a broad spectrum of body systems. **Prerequisites**: Graduate standing in physical therapy.

DPT 720 - Professional Development

Credits 2

Theories and experiences designed to develop skills to accurately, sensitively and assertively communicate with patients, families, and colleagues. Principles of written and oral communication. Professional issues of changes in health care, state and local laws, standards of practice, code of ethics, quality assessment and quality assurance.

Prerequisites: Graduate standing in physical therapy.

DPT 721 - Advanced Topics in Physical Therapy Credits 1

Through in-class and web-assisted instruction, independent study, and mentored project development, prepares students for a variety of clinical competencies including health promotion/wellness, evaluation of alternative and complementary approaches, rural health, and other advanced aspects of clinical practice, ethics, and professional conduct related to physical therapy.

Prerequisites: DPT 710

DPT 722 - Issues in Rural Health

Credits 1

Unique needs of frontier/rural and underserved populations addressed, emphasizing the eclectic nature of practice in these areas, the importance of networking with other disciplines, and special considerations of these populations including functional rehabilitation, time management, travel, emergencies, and involvement of families in treatment. **Prerequisites**: Graduate standing in physical therapy.

DPT 726 - Evidenced-Based Practice in Physical Therapy I

Credits 1

Designed to provide the student with knowledge and hands-on experience in skills required to engage evidence-based clinical practice of physical therapy. Students will learn how to write answerable questions, search the literature, and critically analyze evidence for application in clinical practice. **Prerequisites**: Graduate standing in Physical Therapy.

DPT 727 - Evidence-Based Practice in Physical Therapy II

This 1-credit course builds on DPT 726 and 790, providing students with knowledge skills to implement evidence-based practice in physical therapy. Students will critique special cases of evidence and psychometric properties of diagnostic tools and outcome measures, and create a minimal data set in order to integrate evidence into practice.

Prerequisites: DPT 726 and DPT 790

DPT 730 - Foundations of Observation and Assessment

Credits 2

Basic patient assessment skills with introduction to posture and gait evaluation through observation. Patient history and review of the medical record. Documentation in S.O.A.P. Note and functional outcome formats. Assessment skills emphasized include: anthropometric measures, reflex and sensation testing, goniometry, manual muscle testing, vital signs, and surface palpation. **Prerequisites**: Graduate standing in physical therapy. **Corequisite**: DPT 730L

DPT 730L - Foundations of Observation and Assessment Lab

Credits 2

Lab of basic patient assessment skills including posture, gait evaluation, anthropometric measures, reflex and sensation testing, goniometry, manual muscle testing, vital signs, and surface palpation. Patient history and review of medical records, documentation in SOAP format, and functional outcome formats. **Prerequisites**: Graduate standing in Physical Therapy. **Corequisite**: DPT 730

DPT 732 - Therapeutic Exercise

Credits 2

Holistic approach to evaluation and management of patients with various orthopaedic pathologies and other related movement dysfunction. Emphasis placed on theoretical basis of specific exercise physiology, therapeutic exercise and functional training skills interrelated with clinical decision-making methodology. Rationale for and implementation of treatments with safety awareness and proper body mechanics. **Prerequisites**: DPT 730, DPT 730L; DPT 741 DPT 741L; DPT 744 DPT 744L; DPT 745 DPT 745L. **Corequisite**: DPT 732L.

DPT 732L - Therapeutic Exercise Lab Credits 1

Laboratory sessions to practice the evaluation and management of patients (and patient scenarios) with various orthopaedic pathologies and other related movement dysfunctions. Emphasis on exercise prescription and demonstration, as well as progression. **Prerequisites**: DPT 730, DPT 730L; DPT 741 DPT 741L; DPT 744 DPT 744L; DPT 745 DPT 745L. **Corequisite**: DPT 732.

DPT 735 - Functional Training and Acute Care Credits 3

Performance and application of positioning skills, transfers techniques, and assistive devices. Advancement to clinical decision-making skills and incorporation of learned materials into therapy interventions. Clinical reasoning skills in assessment, treatment design and intervention, goal development and discharge planning for patients in the acute hospital environment. **Prerequisites**: Graduate standing in Physical Therapy. DPT 744, 745, 730. **Corequisite**: DPT 735L

DPT 735L - Functional Training and Acute Care Lab

Credits 1

Hands on performance and application of positioning skills, transfer techniques, and assistive devices. Advancement to clinical decision-making skills and incorporation of learned materials into therapy interventions. Clinical reasoning skills in assessment, treatment design and intervention, goal development and discharge planning for patients in the acute hospital environment. **Prerequisites**: Graduate standing in Physical Therapy. DPT 744, 745, 730.

Corequisite: DPT 735

DPT 740 - Movement Science

Credits 2

This course will introduce students to principles and theories in movement science. Students will be introduced to concepts related to motor control, motor development, and motor learning. Students will also apply these principles to the clinical practice of physical therapy and to observe and assess related phenomena in patients. **Prerequisites**: Enrollment in professional DPT curriculum.

DPT 741 - Orthopaedic Principles

Credits 3

Principles of orthopaedic physical therapy including biomechanics, applied anatomy, and osteokinematic and arthrokinematic concepts examined.

Musculoskeletal system investigated from histological, structural, and functional perspectives.

Prerequisites: Graduate standing in physical therapy.

DPT 742 - Clinical and Pathological Physiology Credits 5

Fundamentals of physiology and pathology related to diseases causing abnormal movement patterns or

capabilities. Processes and diseases most frequently encountered in physical therapy practice emphasized. **Prerequisites**: Graduate standing in physical therapy.

DPT 744 - Gross Anatomy I

Credits 2

Study of gross human anatomy as it applies to physical therapy. Materials to be covered include: muscle, tendon, ligament and nerve innervation of the trunk and upper extremity, structural identification and function of the spine, heart, lungs, abdominopelvic organs, circulatory and sensory systems. Emphasis on relevance of gross anatomy to physical therapy practice. Involves both lecture and laboratory dissection that will cover the upper half of the body. **Prerequisites**: Graduate standing in Physical Therapy. **Corequisite**: DPT 744L

DPT 744L - Gross Human Anatomy Lab ICredits 1

Gross human anatomy cadaver lab with supervised dissection and exploration of muscle, tendon, ligament and nerve innervation of the trunk and upper extremity, structural identification and function of the spine, heart, lungs, abdominopelvic organs, circulatory and sensory systems.

DPT 745 - Gross Anatomy II

Credits 2

Study of gross human anatomy as it applies to physical therapy. Materials to be covered include: muscle, tendon, ligament and nerve innervation of the head, neck, and lower extremity, structural identification and function of the corresponding circulatory and sensory systems. **Prerequisites**: DPT 7444 and DPT 744L. **Corequisite**: DPT 745L

DPT 745L - Gross Human Anatomy Lab IICredits 1

Gross human anatomy cadaver lab with supervised dissection and exploration of muscle, tendon, ligament and nerve innervation of the head, neck, and lower extremity, structural identification and function of the corresponding circulatory and sensory systems. **Prerequisites**: DPT 744 and DPT 744L.

Corequisite: DPT 745

DPT 746 - Neuroanatomy

Credits 3

High level immersion into the anatomy of the nervous system, emphasizing structure and functional relationships. Coursework will also relate the structural relationships of the central and peripheral nervous systems to brain dysfunction and pathology. **Prerequisites**: Graduate standing in physical therapy. **Corequisite**: DPT 746L

DPT 747 - Geriatric Examination and Intervention

Credits 1

Examination, evaluation, plan of intervention, outcomes, patient education, and health promotion as applied to the geriatric client. Issues include factors affecting normal aging, pathological aging, common pathologies associated with aging, quality of life, successful aging, care settings, reimbursement, and public policy. **Prerequisites**: Graduate standing in physical therapy.

DPT 748 - Pharmacology

Credits 2

Actions and effects of pharmaceutical agents commonly encountered in physical therapy clinical practice. **Prerequisites**: Graduate standing in Physical Therapy.

DPT 749 - Applied Exercise Physiology

Credits 2

Review of systems responsible for the generation of energy. Overview of the physiologic responses of the human body to acute bouts of exercise and how training leads to chronic adaptation of selected systems. Course content focuses on principles of exercise, role of nutrients in body metabolism, human development and performances. **Prerequisites**: Graduate standing in physical therapy.

DPT 750 - Prosthetics and Orthotics

Credits 2

Evaluation of medical, surgical and prosthetic and rehabilitation management of amputations. Discussion of design, fabrication and fitting of prosthetic devices as well as general orthotic principles examined. Basic clinical problem solving skills integrated in the context of prosthetic and orthotic management of patients. **Prerequisites**: Graduate standing in Physical Therapy. **Corequisite**: DPT 750L

DPT 751 - Women's Health in Physical Therapy Credits 2

Overview of the anatomical, physiological, nutritional, psychological, and sociological influences throughout the woman's life span including: adolescence, the reproductive years, the middle years, the older age. Discussion of physical therapy management of musculoskeletal, integumentary, cardiopulmonary, and visceral pathologies common to women. **Prerequisites**: Graduate standing in physical therapy.

DPT 752 - Physical Agents and Electrophysiology

Biological processes of injury and repair, clinical application of soft tissue techniques, thermal agents. intermittent compression, continuous motion, electrical stimulation, and mechanical traction. Principles of electrophysics and neurophysiology as they pertain to the use of therapeutic electrical stimulation. Advancement to clinical decisionmaking skills in physical application. Prerequisites: Graduate standing in Physical Therapy. DPT 742, 730, 732. **Corequisite**: DPT 752L

DPT 752L - Physical Agents and Electrophysiology Lab

Credits 1

Hands on performance and clinical application of soft tissue techniques, thermal agents, intermittent compression, continuous motion, electrical stimulation, mechanical traction, therapeutic electrical stimulation. Prerequisites: Graduate standing in Physical Therapy. DPT 742, 730, 732.

Corequisite: DPT 752 **DPT 753 - Electrotherapy**

Credits 2

Principles of a electrophysics and neurophysiology as they pertain to the use of therapeutic electrical stimulation. Application techniques of various electrical stimulation devices also presented. Prerequisites: DPT 742, DPT 752, DPT 730, DPT

DPT 754 - Orthopaedic Assessment in Physical **Therapy**

Credits 3

Evaluation and assessment of upper and lower extremity orthopaedic problems. Discussion and application of functional anatomy, biomechanics, and evaluative manual therapy skills used to differentially diagnose orthopaedic pathologies and disorders. Prerequisites: DPT 730, DPT 730L, DPT 741, DPT 744, DPT 744L, DPT 745, DPT 745L. Corequisite: **DPT 754L**

DPT 754L - Orthopaedic Assessment in Physical Therapy Lab

Credits 1

Evaluation and assessment of upper and lower extremity orthopaedic problems. Practical application of functional anatomy, biomechanics, and evaluative manual therapy skills used to differentially diagnose orthopaedic pathologies and disorders. Prerequisites: DPT 730, DPT 730L, DPT 741, DPT 744, DPT 744L, DPT 745, DPT 745L. Corequisite: DPT 754

DPT 755 - Geriatric and Pediatric Rehabilitation

Credits 3

Examination of factors affecting normal and pathologic systems from birth into aging. Issues include normal developmental sequences and common pathologies across the life span. Evaluation, wellness and leisure activities, and how basic rehabilitation procedures can be modified for the elderly. **Prerequisites**: Graduate standing in physical therapy.

DPT 756 - Neurophysiology

Credits 4

High level immersion into the function of the human central and peripheral nervous systems based on current research and theory. Topics include normal human motor and sensory neurophysiology, cognitive and learning neurophysiology, neuropathophysiology, neuroplasticity, neurodiagnostics and neurologic treatment options.

Prerequisites: DPT 746

DPT 757 - Wound Care

Credits 2

Clinical practice of wound care including physiology of tissue healing, wound assessment tools, dressings and treatment approaches. Processes and diseases most frequently encountered in physical therapy practice specializing in wound care. **Prerequisites**: DPT 742, DPT 752

DPT 758 - Diagnostic Testing and Imaging

Credits 2

Presentation of diagnostic tests used by disciplines and specialties within and outside of the profession of physical therapy. Discussion of blood studies, nuclear medicine studies, and radiologic/X-ray studies. Interpretation of test results as it applies to physical therapy evaluation, intervention planning and treatment. **Prerequisites**: Graduate standing in physical therapy.

DPT 759 - Pediatric Rehabilitation

Credits 2

Provides foundational knowledge of development (typical and atypical) and an overview of pediatric physical therapy practice for children with atypical development. Presents examination, evaluation, and development of physical therapy plans of care for children with various disabilities within the frameworks of family-centered care and disablement/enablement models. Prerequisites: Graduate standing in Physical Therapy. Corequisite: **DPT 759L**

DPT 759L - Pediatric Rehabilitation Laboratory Experience

Focuses on application of developmental concepts and an overview of pediatric physical therapy practice for children with atypical development. Provides students with opportunities to observe/engage in examination, evaluation, and development of physical therapy plans of care for children with various disabilities within the frameworks of family-centered care and enablement models. Prerequisites: Graduate standing in Physical Therapy. Corequisite: DPT 759

DPT 761 - Supervised Clinical Education I Credits 3

The first clinical affiliation is a supervised full-time extended clinical learning experience six weeks in duration. The primary purpose is to provide students with the opportunity to actively engage in learning in order to develop introductory clinical competence in the delivery of services to persons with movement dysfunction. Prerequisites: Successful completion of all course work in the first year of the graduate physical therapy program.

DPT 762 - Supervised Clinical Education II Credits 5

The second clinical affiliation is a supervised, fulltime extended clinical learning experience 11 weeks in duration. The primary purpose is to provide students with the opportunity to actively engage in experiential learning in order to advance clinical competence in the delivery of services to persons with movement dysfunction. Prerequisites: DPT 761

DPT 763 - Supervised Clinical Education III Credits 5

The third clinical affiliation is ten and one-half weeks and is a supervised full-time extended clinical learning experience. The primary purpose is to provide students with the opportunity to actively engage in experimental learning in order to advance clinical competence in the delivery of services to persons with movement dysfunction. Prerequisites: DPT 762

DPT 764 - Supervised Clinical Education IV Credits 6

The fourth clinical affiliation is twelve weeks and is a supervised full-time extended clinical learning experience. The primary purpose is to provide students with the opportunity to actively engage in experiential learning in order to advance clinical competence in the delivery of services to persons with movement dysfunction. Prerequisites: DPT 763

DPT 765 - Clinical Education V

Credits 4

This nine-week clinical affiliation is an extended learning experience for students completing the transitional physical therapy doctorate. The primary purpose is to provide students the opportunity to advance clinical competence in the delivery of physical therapy services to persons with movement dysfunction. Prerequisites: Successful completion or concurrent work in all course work to date in the transitional doctorate physical therapy program.

DPT 770 - Cardiopulmonary Rehabilitation Credits 1

Review of systems responsible for the generation of energy. Over-view of the physiologic responses of the human body to acute bouts of exercise and how training leads to chronic adaptation of selected systems. Course content focuses on principles of exercise, role of nutrients in body metabolism, human development and performance. Prerequisites: Graduate standing in physical therapy. Corequisite/Prerequisite: DPT 770L

DPT 770L - Cardiopulmonary Rehabilitation Lab Credits 1

Lab of basic patient skills including assessment of vital signs, breathing patterns, heart sounds, ECG interpretation, pulmonary function testing, blood gases, chest wall mobility, cough and sputum, ventilation, performance of bronchial drainage, prescribe exercises for patient with compromised cardiopulmonary function. Corequisite: DPT 770

DPT 772 - Physical Therapy Administration Credits 2

General principles of organizations and administration that impact the ethical and legal aspects of physical therapy practice. Topics include budget development, cost accounting, supervision, communication skills, evaluative techniques, and methods of management and quality assurance. **Prerequisites**: Graduate standing in physical therapy.

DPT 774 - Psychosocial Aspects of Physical Therapy

Credits 2

Social and psychological issues which arise during illness examined and discussed in an open class discussion format. Emphasis on self-awareness as well as awareness of others with respect to cultural differences, religious beliefs, addictions, and coping strategies during stress. Prerequisites: Graduate standing in physical therapy.

DPT 780 - Balance and Vestibular Rehabilitation

This course will introduce students to principles and theories of rehabilitation for the patient with balance dysfunction. There will be emphasis on sound clinical reasoning and assessment of balance impairment and disability. Students will be exposed to theoretical applications of different treatment modalities in balance and vestibular rehabilitation. **Prerequisites**: Enrollment in professional DPT curriculum.

DPT 785 - Orthopaedic Rehabilitation Credits 2

Manual therapy and therapeutic exercise techniques for the extremities with emphasis on integrating these techniques into treatment regimes for specific orthopaedic pathologies/disorders. Includes pathogensis, clinical presentation, medical/surgical management and rehabilitation. Review, integrate, and enhance knowledge from previous course work as it pertains to appropriate entry-level application.

Prerequisites: DPT 732, DPT 741, DPT 754.

Corequisite: DPT 785L

DPT 785L - Orthopaedic Rehabilitation Lab Credits 1

Orthopaedic Rehabilitation lab with supervised integration of manual therapy and therapeutic exercise techniques for the extremities. Focus will be on developing and providing treatment regimes for specific orthopaedic pathologies/ disorders. Students will refine skills from previous course work as it pertains to appropriate entry-level application. Prerequisites: DPT 732, DPT 741, DPT 754.

Corequisite: DPT 785

DPT 786 - Neurological Rehabilitation Credits 3

Course fosters clinical reasoning and critical analysis skills across elements of patient client management for individuals with neurologically-based movement disorders. Students are exposed to theory and movement science as related to clinical reasoning. Students are expected to incorporate professional behavior, scientific and clinical knowledge and critical analysis to clinical applications. **Prerequisites**: DPT 730, DPT 732, DPT 744, DPT 745, DPT 746, DPT 756.

Corequisite: DPT 786L

DPT 786L - Neurologic Rehabilitation Laboratory Experience

Credits 1

Course emphasizes hands-on skill development, clinical reasoning, and critical analysis skills for all elements of patient-client management for

individuals with neurologically-based movement disorders across the lifespan. Students are expected to incorporate professional behavior, scientific and clinical knowledge, critical analysis and competent skill performance in laboratory and practical skill application. Corequisite: DPT 786

DPT 787 - Integrated Rehabilitation Credits 2

Assessment and treatment of advanced orthopedics, advanced neurological, and spinal cord injured patients utilizing comprehensive techniques for spinal cord injury (SCI), orthopedics, and neurological treatment. Through dynamic patient case problems, students evaluate, plan, and implement course of treatment. Prerequisites: Graduate standing in Physical Therapy and DPT 785 and DPT 786. Corequisite: DPT 787L

DPT 787L - Integrated Rehabilitation Lab Credits 1

Hands on assessment and treatment of advanced orthopedics, advanced neurological, and spinal cord injured patients utilizing comprehensive techniques for spinal cord injury (SCI), orthopedics, and neurological treatment. Through dynamic patient case problems, students will be able to evaluate, plan, and implement a course of treatment. **Prerequisites**: Graduate standing in Physical Therapy and DPT 785 and DPT 786. Corequisite: DPT 787

DPT 788 - Spine Examination and Treatment Credits 2

Spine examination including biomechanics, observation, range of motion, muscle strength, joint play and special tests. Inclusion of examination schema, clinical reasoning skills and differential diagnosis of commonly seen spine pathology. Emphasis on hands-on examination, assessment, and treatment including manual therapy, spinal mobilization and spinal manipulation skills. **Prerequisites**: Graduate standing in physical therapy.

Corequisite: DPT 788L

DPT 788L - Spine Examination and Intervention Lab

Credits 1

Lab sessions focusing on hands-on examination, assessment, and treatment of spine dysfunction, including manual therapy, spinal mobilization and spinal manipulation skills. **Prerequisites**: Graduate standing in Physical Therapy or consent of instructor. Corequisite: DPT 788

DPT 790 - Clinical Research in Physical Therapy

Introduction to principles and concepts of clinical research in physical therapy. Covers development of the research question, measurement issues, statistical analysis, literature review, and writing of results.

Prerequisites: Graduate standing in physical therapy.

DPT 791 - Applied Research Statistics

Credits 3

Review of foundations, concepts of measurement, and design in clinical research. Emphasis on handson data analysis of clinically relevant physical therapy research designs including descriptive statistics, statistical inference, analysis of differences, and analysis of relationships. **Prerequisites**: Graduate standing in physical therapy.

DPT 793 - Seminar

Credits 1

Preparation and presentation of seminars on topics of current interest in physical therapy and rehabilitation. Topic changes by semester and by course instructor; see class schedule for details. Prerequisites: Enrollment in professional DPT curriculum.

DPT 795 - Independent Study

Credits 1-6

Students pursue a topic related to physical therapy beyond that covered in the graduate curriculum. Satisfactory completion accomplished through individualized, self-directed study. Topics based on student preference and faculty approval. Faculty and student jointly determine goals, objective and evaluation methods. Notes: May be repeated to a maximum of six credits. Prerequisites: Graduate standing in physical therapy.

DPT 798 - Directed Research

Credits 1-6

Critical inquiry by participating in new or ongoing research with faculty who serve as project advisors. Students summarize research by a written report and present each project orally to the faculty and area clinicians. Notes: May be repeated to a maximum of six credits. Prerequisites: DPT 790

Other Courses

DPT 750L - Prosthetics and Orthotics Lab

Credits 1

Application of medical, surgical and prosthetic and rehabilitation management of amputations. Design, fabrication and fitting of prosthetic devices as well as general orthotic principles examined. Basic clinical problem solving skills integrated in the context of prosthetic and orthotic management of patients.

Prerequisites: Graduate standing in Physical

Therapy. **Corequisite**: DPT 750

PTS 744 - Gross Human Anatomy

Credits 3

Gross anatomy studied regionally stressing relationships of major structures, organs, vessels and nerves. Prosected human cadaver observation by students included in laboratory session (PTS 744L). All major areas of the body covered. Reference to the relationship of anatomical structures to pathology, traumatic injury and medicine stressed.

Prerequisites: Undergraduate Anatomy, Physiology or Biology lab course. Corequisite: PTS 744L

PTS 744L - Gross Human Anatomy Lab

Credits 1

Gross human anatomy cadaver lab with supervised examination and exploration of prosected human cadavers. All major areas of the body are covered. References to the relationship of anatomical structures to pathology, traumatic injury and medicine stressed. Prerequisites: Undergraduate Anatomy, Physiology or Biology lab course or equivalent. Corequisite: PTS 744

PTS 747 - Human Neuroanatomy

Credits 3

High level immersion, including cadaveric prosection, into the anatomy of the central nervous system, emphasizing structure and functional relationships. Coursework will also relate these structural relationships to brain dysfunction and pathology. Prerequisites: Graduate standing.

School of Community Health Sciences

Mary Guinan, Founding Dean

(2004) Professor of Epidemiology and Community Health; M.D., Johns Hopkins University; Ph.D., University of Texas.

Shawn Gerstenberger, Executive Associate Dean (1997) Professor of Environmental and Occupational Health; B.S., University of Wisconsin-Platteville University; M. S., Ph.D., University of Illinois.

Graduate Coordinators

Chino, Michelle (MPH, M.Ed., & Ph.D. Programs) (2000) Associate Professor of Environmental and Occupational Health, B.S., M.S., Ph.D. University of New Mexico.

Shen, Jie

(2006) Associate Professor and Chair of Health Care Administration and Policy; Ph.D. Virginia Commonwealth University.

SCHS Graduate Faculty

Abella, Scott

(2011) Associate Research Professor of Environmental and Occupational Health; B.S. Grand Valley State University; M.S. Clemson University; Ph.D. Northern Arizona University

Bungum, Timothy

(2001) Associate Professor of Biostatistics and Epidemiology; B.A. Luther College; M.S., D.P.H University of South Carolina.

Buttner, Mark P.

(1989) Associate Professor of Environmental and Occupational Health; B.S. University of Wisconsin; M.S. University of Nevada Las Vegas; Ph.D University of Nevada Reno.

Chino, Michelle

(2000) Associate Professor of Environmental and Occupational Health; B.S., M.S., Ph.D. University of New Mexico.

Cochran, Christopher

(1997) Associate Professor of Health Care Administration and Policy; B.A. University of Texas, El Paso; M.PA.; Ph.D. University of South Carolina.

Cruz, Patricia

(1995) Associate Professor of Environmental and Occupational Health; B.S. University of

Puerto Rico; M.S. University of Central Florida; Ph.D. University of Nevada Reno.

Dodge Francis, Carolee

(2007) Assistant Professor of Environmental and Occupational Health; B.S., M.A., Ed.D., University of St. Thomas.

Gerstenberger, Shawn

(1997) Professor of Environmental and Occupational Health; B.S., University of Wisconsin- Platteville University; M. S., Ph.D., University of Illinois.

Ginn, Gregory

(2000) Associate Professor of Health Care Administration and Policy; B.A., M.Ed., MBA, Ph.D. University of Texas, Austin.

Liu, Darren

(2011) Assistant Professor of Health Care Administration and Policy; B.S. Kaohsiung Medical University, Taiwan; M.H.A. China Medical University, Taiwan; M.S. University of Pittsburgh; Dr. P.H. University of Pittsburgh

Moonie, Sheniz

(2006) Associate Professor of Biostatistics and Epidemiology; B.S., University of California San Diego; M.S., California Polytechnic University, Pomona; Ph.D. Saint Louis University Pinheiro, Paulo () Assistant Professor of Epidemiology;

Regin, Charles

(1987) Assistant Professor of Health Promotion, B.S., M.S. University of Wisconsin-La Crosse; Ph.D. Southern Illinois University.

Shen, Jie

(2006) Associate Professor and Chair of Health Care Administration and Policy; Ph.D. Virginia Commonwealth University.

Stetzenbach, Linda

(2005) Professor Emerita of Environmental and Occupational Health; B.S., M.S., Ph.D., University of Arizona.

Thompson-Robinson, Melva

(2004) Associate Professor of Health Promotion; B.S., University of Michigan; M.S. Ohio University; D.P.H., University of South Carolina. Wong, David (2008) Associate Research Professor; B.Sc., M.Sc., Ocean University of Quingdao; Ph.D. City University of Hong Kong.

Programs

Master of Public Health M.P.H.

The UNLV School of Community Health Sciences offers the Master of Public Health (MPH) degree to prepare students to become effective public health practitioners, researchers, and teachers who will competently identify public health problems and needs, develop effective strategies to address those needs, and promote appropriate services to be available for the protection of human health.

ConcentrationAreaswithintheMPHDegreeEpidemiologyandBiostatisticsEnvironmentalandOccupationalHealthSocialandBehavioralHealthHealth Care Administration and Policy

Master of Health Care Administration M.H.A.

The UNLV School of Community Health Sciences offers the Master of Health Care Administration (MHA) to provide students with a broad view of the healthcare delivery system and an understanding of health and disease. Students will develop analytical skills through the curriculum and internships to prepare them for leadership positions in healthcare organizations, financing, and delivery of healthcare services.

Doctorate in Public Health Ph. D.

The UNLV School of Community Health Sciences offers the Doctorate in Public Health to prepare students to become effective public health practitioners, researchers, and educators who will competently identify public health problems and needs, develop effective strategies to address those needs and promote appropriate services to be available for the protection of human health.

Subplans offered within the PHD Degree

Environmental and Occupational Health Social and Behavioral Health Health Care Administration and Policy Epidemiology and Biostatistics (under development) Return to: Division of Health Sciences

Health Promotion M.Ed. (Discontinued)

This program has been discontinued.

Master of Education in Health Promotion

The goal of the 36-semester credit hour Health Promotion graduate program is to provide students with the theory, knowledge, and skills needed to integrate the principles of health promotion into a variety of community, research, clinical, business or school settings and/or to pursue advanced study. Specifically, the Health Promotion degree program will prepare students to: 1) assess and communicate individual, family, and community needs, 2) plan, implement, evaluate, and administer programs, 3) act as a resource person by coordinating provisions for services and applying appropriate research principles and methods, and 4) advance the goals of job-related professional organizations. To this end, eight concentrations in the Health Promotion degree are offered.

The **Administration** concentration is designed for those interested in assuming leadership roles in their organization such as health program planners, health care project specialists, or health officers. The Communication concentration is designed for individuals interested in the dissemination of health promoting information and skills through varied strategies leading to health media specialist or health communication expert occupations.

The **Counseling** concentration is designed for anyone wishing to assist others one on one or in small groups regarding effective and positive strategies dealing with critical health issues. Such professionals include, but are not limited to, employee assistance program educators, patient educators, or mental health counselors.

The **Education** concentration is designed to improve the delivery skills of any educator at any teaching level, at varied sites such as school health teachers, public health educators, and employee wellness associates.

The **Environmental Health** concentration is designed for those individuals seeking occupations such as health and safety specialists or environmental health consultants due to an interest in the relationship that exists between the physical

environment and the health of individuals and groups in that environment.

The **Gerontology** concentration is designed for individuals who are interested in health promotion strategies geared specifically for older adults delivered through professional roles such as gerontology outreach workers or program planners for seniors.

The **Nutrition and Fitness** concentration is designed for those interested in the fields of corporate health promotion or personal wellness training who desire to advise individuals and groups regarding eating choices and activity regimens to enhance performance and health.

The **Interdisciplinary** concentration, clearly the most flexible, is designed for those students with specific needs who would be best served by selecting a myriad of graduate courses from across campus. Individuals such as school nurses, epidemiologists, and industrial hygienists could benefit from the individualized approach offered in this concentration.

Admission Requirements

(This program is no longer offering admission.)

Degree Requirements

The Master in Education in Health Promotion requires a minimum of 36 semester hours.

- 1. A student must maintain a 3.00 GPA.
- 2. A student may take courses full or part time, with day and evening classes available.
- 3. Students must either take a comprehensive exam and successfully complete an additional three credits of advisor approved course work or successfully complete HED 750 Graduate Project in Health Promotion to fulfill the requirement of a capstone experience in the degree program.
- 4. Master's degrees must be completed within a six-year period, and continuous enrollment must be maintained throughout the six years.

Curriculum

The curriculum for the M.Ed. in Health Promotion consists of the following:

Health Promotion Core Requirements - Total Credits: 12

HED 705 - Theoretical Foundations in Health Promotion

HED 720 - Program Planning and Grant Writing in Health Promotion

HED 730 - Program Evaluation in Health Promotion HED 735 - Practical Applications in Health Promotions

Health Promotion Research Core Requirements - Total Credits: 9

HED 725 - Epidemiology and Public Health

or

EAB 705 - Epidemiology and Public Health

or

EPY 702 - Research Methods

or

EAB 700 - Research Methods for Public Health

EPY 718 - Qualitative Research Methodologies

or

EOH 715 - Qualitative & Field Methods for Public Health

or

EPY 721 - Descriptive and Inferential Statistics: An Introduction

or

EAB 703 - Biostatistical Methods for the Health Sciences

Health Promotion Capstone Experience - Total Credits: 3

HED 750 - Graduate Project in Health Promotion or

Comprehensive Exam and advisor approved course(s)

or

HED 755 - Thesis Research

Selected Concentrations - Total Credits: 12 Administration Concentration

HCA 701 - U.S. Health Care System: Programs and Policies

HCA 703 - Management of Health Service Organizations and Systems

HCA 704 - Health Care Economics

HCA 705 - Health Care Accounting and Finance

HCA 707 - Operations and Quality Management of Health Services

HCA 708 - Information Systems in Health Services Management

HCA 710 - Human Resources Management of Health Care Organizations

HCA 761 - Health Care Law and Ethics for Managers

PUA 701 - Principles of Public Administration

PUA 704 - Seminar in Fiscal Administration

PUA 713 - E-Government Implications for Public Sector Organizations

PUA 708 - Seminar in Public Personnel Administration

PUA 719 - Personnel Assessment and Selection

PUA 740 - Urban Administration

PUA 742 - State Government Administration

PUA 792 - Current Issues in Public Administration

See the Department of Health Promotion for additional curricular information.

Communication Concentration

COM 603 - Public Communication

COM 604 - Principles of Persuasion

COM 607 - Communication Between the Sexes

COM 634 - Conflict Management

COM 684 - Political Communication

COM 706 - Seminar in Intercultural Communication

COM 710 - Survey of Communication Studies

COM 712 - Empirical Research Methods

COM 725 - College Teaching in Communication

COM 730 - Theories of Communication

COM 741 - Social Movements as Rhetorical Form

COM 780 - Persuasion

COM 781 - Seminar in Argumentation

COM 784 - Political Communication

COM 789 - Selected Topics in Communication

See the Department of Health Promotion for additional curricular information.

Counseling Concentration

COU 610 - Eating Disorders: Etiology and Treatment

CED 639 - Problem Gambling Counseling I

CED 640 - Problem Gambling Counseling II

CED 645 - Trauma and Addiction

CED 661 - Use and Application of Technology in Counseling

CED 699 - Special Topics

CED 700 - Special Problems: Counseling and Educational Psychology

CED 701 - Introduction to Counseling

CED 703 - Counseling with Expressive Arts and Activities

CED 710 - Relationships Through the Lifespan

CED 711 - Counseling Appraisal and Inquiry

CED 713 - Introduction to School Counseling

CED 715 - Counseling and Consultation Theories

CED 721 - Career Theories and Practices

CED 727 - Counseling Process and Procedures

CED 733 - Introduction to Group Counseling

CED 735 - Substance Abuse Prevention and Treatment

CED 738 - Introduction to Community Mental Health Counseling

CED 739 - Vocational Placement and Community Resources

CED 742 - Introduction to Community Counseling

CED 743 - Ethical and Legal Issues in Counseling

CED 745 - Assessment, Treatment, and Case Management in Addictions

CED 755 - Planning, Management, and Evaluation of Addictions and Mental Health Programs

CED 766 - Psychopathology and Wellness Models in Counseling

CED 772 - Counseling and Spirituality

CED 781 - Problem Gambling Counseling

CED 782 - Counseling with Potential Suicides

CED 785 - Eating Disorders Counseling

CED 789 - The Student in Higher Education

See the Department of Health Promotion for additional curricular information.

Education Concentration

EDW 746 - History and Development of Two Year Postsecondary Institution

EDW 747 - Workforce Education Teaching

CIG 660 - Multicultural Education

CIG 662 - Theory and Research Multicultural Education

CIT 602 - Technology Applications Secondary Curriculum

CIT 608 - Integrating Technology in Teaching and Learning

CIG 601 - Curriculum and Instruction Urban Settings

HED 607 - Stress Management

SW 622 - AIDS: An Interdisciplinary Perspective

See the Department of Health Promotion for additional curricular information.

An Interdisciplinary Perspective

HED 629 - Education for Sexuality

HED 630 - Nutrition

HED 635 - Health Studies on Dangerous Drugs

HED 640 - Health Promotion and Wellness

ECE 709 - Investigations in Early Childhood Education

ESP 701 - Introduction to Special Education and Legal Issues

See the Department of Health Promotion for additional curricular information.

Environmental Health Concentration

EOH 702 - Community Based Participatory Research Methods

EOH 711 - Diseases that Changed the World

EOH 713 - Public Health Law

EOH 732 - Children, Development, Health, and the Environment

EOH 740 - Fundamentals of Environmental Health

EOH 747 - Transmission of Infectious Disease

EOH 757 - Parasitology and Public Health

EOH 760 - Racial and Ethnic Disparities in Health

EOH 765 - Seminar in Environmental Justice and Public Health

EOH 767 - Bioaerosols and Human Health

EOH 769 - Advanced Pollution Ecology

EOH 777 - Emerging Infectious Disease

EOH 601 - Advanced Environmental Toxicology

See the Department of Health Promotion for additional curricular information.

Gerontology Concentration

Students may select one (3 credits) of the remaining courses

THTR 793 - Special Topics in Theatre

SOC 684 - Sociology of Death and Dying (Spring and sometimes Summer)

SOC 682 - Aging and Social Policy

See the Department of Health Promotion for additional curricular information.

For those students wishing to complete the coursework for a Certificate in Gerontology, the following must be completed:

PSY 442 - Psychology of Aging (prerequisite PSY 101) usually offered every semester and the Summer KIN 461 - Physical Activity in Aging-(usually offered every year, varies between Fall and Spring) KIN 462 - Adult Development in Aging (usually offered every year varies Between Fall and Spring) NUR 486 - Aging and Social Policy (every Spring)

Nutrition and Fitness Concentration

KIN 605 - Sports Nutrition

KIN 685 - Physical Activity and the Law

KIN 691 - Exercise Physiology

KIN 737 - Biomechanics of Strength

KIN 739 - Evaluation of Physical Working Capacity

KIN 740 - Advanced Exercise Physiology

KIN 745 - Human Energy Metabolism

See the department for additional curricular information.

Interdisciplinary Concentration

In addition to the courses listed above, students may select, with guidance and approval from their advisor, any graduate-level course that meets individual and professional needs identified by students. The core courses in health promotion also provide substantive contributions to other graduate programs offered across campus. These programs include, but are not limited to, those programs offered by the College of Business and the departments of Communication Studies, counseling, Curriculum and Instruction,

Economics, Educational Leadership, Kinesiology, Political Science, Psychology, Public Administration, Sociology, Special Education and the Schools of Journalism and Media Studies and Social Work.

The design of the concentration component must revolve around a consistent theme and be relevant to the goals and objectives of the program and of the student. Design is to ensure a breadth and depth in a supportive area of concentration such as curriculum and instruction, special education, health promotion, school athletic administration, educational leadership, education administration, sport and recreational management, and psychology of sport.

Public Health M.P.H.

The Master of Public Health Degree Program is designed to prepare students to be public health professionals in the private and public sectors with the overall goal of promoting and protecting the health of individuals in our society. The Master of Public Health degree (MPH) is comprised of an 18credit required core for every student. The 27 credits represent the four primary areas of specialty offered in Public Health programs, plus one additional course entitled Fundamentals of Public Health. The four specialty areas include: (1) Social and Behavioral Health. (2) Environmental and Occupational Health. (3) Health Care Administration and Policy, and (4) Biostatistics and Epidemiology. In addition to the core courses, each student will select one 27 to credit concentration area from one of the four aforementioned concentrations. All candidates will finish their MPH degree with a 3-6 credit capstone project resulting in a 45-credit degree program.

Educational Objectives

The purpose of the MPH Program is to prepare individuals to become effective health care practitioners, researchers and teachers who will competently identify public health problems and needs, develop effective strategies to address those needs, and promote appropriate services to be available for the protection of human health.

At a minimum, the following criteria should be met to assure each student a) develops an understanding of the areas of knowledge that are basic to public health, b) acquires skills and experience in the application of basic public health concepts and of specialty knowledge to the solution of community health problems, and c) demonstrates integration of knowledge through a capstone experience.

Admissions Requirements

To be considered for admission to the MPH, an applicant must:

- 1. Hold a bachelor's degree or recognized equivalent from a regionally accredited institution and have adequate preparation in the biological, physical, or social sciences. A criterion for admission is at least a B (3.0) grade-point average or the equivalent in work completed after the first two years of a bachelor's degree program and in all post-baccalaureate course work.
- 2. Completion of the school's application process.
- 3. Submit a personal essay describing what you perceive to be pressing public health issues, why a career in the field appeals to you, and how it will use your strengths and commitment
- 4. Three letters of recommendation
- 5. Take and submit scores for the Personal Potential Index (PPI) exam
- 6. Student's that do not have a Master's degree or higher must submit scores for the GRE
- 7. Satisfactory score on the Test of English as a Foreign Language (TOEFL) is required for applicants whose first language is not English
- 8. Official copies of all transcripts sent to the Graduate College and unofficial copies to the School of Public Health

Degree Requirements

All students are required to complete six core courses including (18 credits): Biostatistics, Epidemiology, Fundamentals of Environmental and Occupational Health, Theoretical Principals of Health Promotion, Survey of U.S. Health Care Systems, and Fundamentals of Public Health. Additionally, all students are required to complete a three credit internship and a Capstone Project. The Capstone Project requirement may be fulfilled by a professional paper or a thesis. Students will also be required to take seven courses (18-21 credits) in a concentration area and complete a capstone experience (3-6 credits). The total program of study is a minimum of 45 credits. A student must have at least a B (3.0) grade point average in all graduate work in order to graduate.

The MPH degree will be awarded only when all these requirements are met.

MPH Core Course Requirements - Total Credits: 18

1. HED 710 - Fundamentals of Public Health

- 2. EOH 740 Fundamentals of Environmental Health
- 3. EAB 705 Epidemiology and Public Health
- 4. HCA 701 U.S. Health Care System: Programs and Policies
- 5. HED 705 Theoretical Foundations in Health Promotion
- 6. EAB 703 Biostatistical Methods for the Health Sciences

Social and Behavioral Health Concentration - Total Credits: 27

- I. Students are required to take the following courses Credits: 12
- 1. HED 720 Program Planning and Grant Writing in Health Promotion
- 2. HED 730 Program Evaluation in Health Promotion
- 3. EAB 700 Research Methods for Public Health **OR** EAB 785 Oualitative Methods
- 4. EOH 705 Social Epidemiology **OR** EOH 760 Racial and Ethnic Disparities in Health
- II. Six (6) to Nine (9) credits may be selected from the following list:

HED 607 Stress Management

HED 627 Methods in Health Education

HED 629 - Education for Sexuality

HED 630 Nutrition (credits: 3)

HED 635 Health Studies of Dangerous Drugs

HED 760 - Technology in Health Promotion

EOH 793 - Internship in Environmental Health

III. Internship Requirement-Total Credits: 3 EOH 793 - Internship in Environmental Health

** 3 credits are required; an additional 3 credits may be taken as an elective for a total of 6 credits of internship.

IV. Capstone Requirement

HED 750 - Graduate Project in Health Promotion

OR HED 755 - Thesis Research

*Students opting to take HED 750 (3 credits) must take a total of 9 credits of electives to reach the required minimum of 45 hours.

Environmental and Occupational Health Concentration - Total Credits: 27

- I. Students are required to take the following courses -Credits: 12
- 1. EOH 601 Advanced Environmental Toxicology
- 2. EOH 717 Food Safety and Public Health **OR** EOH 747 Transmission of Infectious Disease

3. EOH 765 - Seminar in Environmental Justice and Public Health **OR** EOH 732 - Children, Development, Health, and the Environment 4. EAB 700 - Research Methods for Public Health **OR** EOH 709 - Scientific/Technical Writing for the Health and Life Sciences

II. Six (6) to Nine (9) credits may be selected from the following list:

EOH 705 - Social Epidemiology

EOH 713 - Public Health Law

EOH 715 - Qualitative & Field Methods for Public Health

EOH 732 - Children, Development, Health, and the Environment

EOH 757 - Parasitology and Public Health

EOH 760 - Racial and Ethnic Disparities in Health

EOH 765 - Seminar in Environmental Justice and Public Health

EOH 767 - Bioaerosols and Human Health

EOH 769 - Advanced Pollution Ecology

EAB 716 - The Epidemiology of Obesity

EOH 777 - Emerging Infectious Disease

EOH 795 - Special Topics in Public Health

EOH 796 - Independent Study in Environmental Health

EOH 793 - Internship in Environmental Health

III. Internship Requirement-Total Credits: 3

EOH 793 - Internship in Environmental Health

** 3 credits are required, an additional 3 credits may be taken as an elective for a total of 6 credits of internship

IV. Required Capstone Project: Students must receive prior approval from their committee before registering for

any capstone experiences.

EOH 794 - Professional Paper in Environmental Health

EOH 798 - Thesis Research

*Students opting to take EOH 794 (3 credits) must take a total of 9 credits of electives to reach the required minimum of 45 hours.

Health Care Administration and Policy Concentration - Total Credits: 27

I. Students are required to take the following courses-Total Credits: 15

1. HCA 703 - Management of Health Service Organizations and Systems

2. HCA 705 - Health Care Accounting and Finance

- 3. HCA 706 Strategic Management of Health Services
- 4. HCA 707 Operations and Quality Management of Health Services
- 5. HCA 708 Information Systems in Health Services Management
- II. Plus one of the following 3 credit-hour course:

HCA 704 - Health Care Economics

HCA 711 - Advanced Health Care Finance

HCA 652 Health Politics and Policy

HCA 761 - Health Care Law and Ethics for Managers

HCA 680 - Organization and Management of Long-Term Care Services

HCA 713 - Internship in Health Care Administration **OR** Other advisor approved courses from the pool of university approved graduate level courses.

III. Internship Requirement- Total Credits:3 HCA 713 - Internship in Health Care Administration

** 3 credits are required; an additional 3 credits may be taken as an elective for a total of 6 credits of internship.

IV. Required Capstone Project

HCA 709 - Health Care Administration Capstone

Course **OR** HCA 799 - Thesis Research

*Students opting to take HCA 709 (3 credits) must take a total of 6 credits of electives to reach the required minimum of 45 hours.

Biostatistics and **Epidemiology Concentration - Total Credits: 27**

- I. Students are required to take the following courses - Total Credits: 12
- 1. EAB 700 Research Methods for Public Health
 - 2. EAB 715 Chronic Disease Epidemiology
- 3. EAB 725 Epidemiology of Infectious Diseases
 - 4. EAB 763 Linear Statistical Models
- II. Students may select from one or two of the following - Total Credits: 3-6

EOH 705 - Social Epidemiology

EAB 720 - Grant Writing for Epidemiology and Public Health Research

EAB 795 - Special Topics in Epidemiology and **Biostatistics**

EAB 796 - Independent Study in Epidemiology and Biostatistics

EAB 716 - The Epidemiology of Obesity

EAB 733 - Survey Sampling for the Health Sciences

EAB 735 - Outbreak Investigation

EAB 743 - Experimental Design for the Health Sciences

EAB 753 - Nonparametric Statistics for Public Health

EAB 773 - Survival Analysis for Public Health

III. Internship Requirement- Total Credits: 3 EAB 793 - Internship in Epidemiology and **Biostatistics**

** 3 credits are required, an additional 3 credits may be taken as an elective for a total of 6 credits of internship.

IV. Required Capstone Project - Total Credits: 3-6

* Students must receive prior approval from their committee before registering for any capstone experience.

EAB 798 - Thesis Research in Epidemiology and

EAB 794 - Professional Paper in Epidemiology and Biostatistics

Public Health Ph.D.

The Schools of Community Health Sciences (SCHS) at UNLV and UNR are pleased to offer a collaborative doctoral program (Ph.D.) in Public Health. The collaboration between the two schools represents a unique, statewide approach to public health training and research, drawing on complementary expertise and opportunities at both universities to create a high-quality academic program that maximizes resources and flexibility.

Educational Objectives

The Ph.D. in Public Health is designed to prepare students for careers in which advanced analytical and conceptual capabilities are required, such as university teaching, research, consulting, policy development or other high-level positions.

The curriculum was developed jointly by faculty from the Schools of Public Health at the University of Nevada, Reno, and the University of Nevada, Las Vegas, with input from representatives of academia and the public health community. The curriculum provides a comprehensive and interdisciplinary examination of topics and experiences necessary to produce graduates who are ready to secure employment in the public health arena.

Students in the program are admitted to either UNLV or UNR and follow the course requirements from their home institution. Courses may be taken at either institution. A Chair from the admitting institution supervises and the dissertation but the doctoral committee may include members from either or both institutions.

This program is competitive and space is limited. More students will apply than will be admitted. The most competitive students will have a strong academic record and a clear plan for their proposed research.

Admission Requirements-UNLV

Admission into the Public Health PhD Program at UNLV will require applicants to meet the standard criteria of the UNLV Graduate College, applicable to graduate students, both domestic international, and contingent upon the qualifications of the applicant and the availability of openings for new students. Doctoral students are admitted as a cohort, once a year, for the fall semester. Applicants must have submitted all required materials by the April 1 deadline for admission in the following fall semester. Students will be admitted directly into the doctoral program and all admissions will require the final approval of the Dean of the UNLV Graduate College. In addition to the generic requirements of the UNLV Graduate College applicants will be expected to meet the following criteria:

- Earned a bachelor's and Masters of Public Health (MPH) or a master's degree in an appropriate field from an accredited university. Applicants educated outside of the United States will need to demonstrate proof of equivalent education and advanced degrees.
- A minimum grade point average of 3.0 (4.0=A) earned in a masters' program of study. The most competitive students will have a master's level GPA of 3.5 or higher.
- 3. Applicants must present competitive Graduate Record Exam (GRE) scores on verbal, quantitative and analytical measures. GRE scores will be assessed relative to other applicants in the pool, as well as relative to other graduate programs at UNLV. The exam must have been taken with the institutions' graduate school/college requirements. The most competitive students will have a combined verbal/quantitative GRE score of 1200 (old test) /300 (new test) or higher. The GRE is required for all applicants.

- 4. Demonstrated oral and written language competency-Applicants from countries where English is not the native language, or who do not receive a degree from an institution where English is the language of instruction must show competency in English, meeting the Graduate College or Graduate School requirements: "a minimum score of 550 on the written or 213 on the computerized Test of English as a Foreign Language (TOEFL) or 85 on the Michigan Test"
- 5. Letters of Recommendation-Three (3) letters of recommendation are required from faculty and other individuals who can evaluate the applicant's motivation, academic capability, scholarship potential, and personal goals for doctoral study.
- 6. Written Self-Presentation- Applicants must submit for review a written statement of personal career, educational and scholarship goals including identification of research interests. The most competitive students will clearly identify their plan for dissertation research and its contribution to the field of public health.
- 7. Interview-Applicants may be asked to participate in an interview with member(s) of the Admissions Committee, either in person or by telephone. Applicants may also be asked to submit a writing sample.
- 8. Applicants must identify an Area of Emphasis (sub plan) at the time of application.

Degree Requirements

Completion of the Ph.D. demonstrates that the graduate has the advanced research skills and competencies necessary to succeed in high level research careers.

All students are required to successfully complete coursework that provides a public health foundation, and an Area of Emphasis in one of the four public health disciplines, and a minimum of 18 dissertation credits. Students with an MPH from the UNLV SCHS must complete 48 credits beyond the Master of Public Health (MPH). Students with an MPH from another institution must complete 54 credits beyond the masters. Students with a master's degree in a related field must complete 63 credits beyond the Master's degree.

Upon admission each student will be assigned an academic (not dissertation) advisor who will help the

student begin planning a program of study. Students are expected to identify a dissertation committee before the end of their second semester in the program.

Required Core Courses:

All students are required to take or have taken at the Master's level the following 27 credit hours or their approved equivalent:

UNLV Courses

OR

EOH 740 - Fundamentals of Environmental Health EAB 703 - Biostatistical Methods for the Health Sciences

HED 705 - Theoretical Foundations in Health Promotion

EOH 747 - Transmission of Infectious Disease

EAB 705 - Epidemiology and Public Health

HCA 701 - U.S. Health Care System: Programs and Policies

EOH 704 - Ethics in Public Health

All doctoral students will take 6 hours of Seminar. Seminars are from 1 to 3 credits, offered every semester, and cover a range of topics in the field.

Areas of Emphasis

In addition to the core courses, students will select 27 credits from a list of SCHS courses in an identified emphasis area in accordance with the advising plan developed with their academic advisor. The 27-credit requirement includes 6 hours of seminar, taken over the course of the program. Seminars are from 1 to 3 credits, offered every semester, and cover a range of topics in the field.

Environmental and Occupational Health UNLV Courses

OR

Students will select 5 courses from the below list:

 $EOH\ 709$ - Scientific/Technical Writing for the Health and Life Sciences

ENV 711 - Risk Assessment and Risk Management or

ENV 712 - Environmental Risk Decision Making

EOH 717 - Food Safety and Public Health

EOH 737 - Public Health Microbiology

EOH 757 - Parasitology and Public Health

EOH 767 - Bioaerosols and Human Health

EOH 765 - Seminar in Environmental Justice and Public Health

EOH 769 - Advanced Pollution Ecology

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PCS

PUI PUI EOH 777 - Emerging Infectious Disease

HPS 680 - Industrial Hygiene

HPS 781 - Industrial Hygiene II

EAB 715 - Chronic Disease Epidemiology

EOH 765 - Seminar in Environmental Justice and

Public Health

Students will also have a research requirement comprised of 3 courses from the list below:

EAB 700 - Research Methods for Public Health

AND two of the following:

EAB 733 - Survey Sampling for the Health Sciences

EAB 753 - Nonparametric Statistics for Public Health

EAB 763 - Linear Statistical Models

EAB 773 - Survival Analysis for Public Health

EAB 783 - Multivariate Methods for the Health Sciences

Social Behavioral Health

Students are required to take the following two classes plus 12 credits of additional committee approved courses.

EOH 705 - Social Epidemiology

EOH 760 - Racial and Ethnic Disparities in Health

Students also have a research requirement comprised of 3 courses from the list below:

EAB 700 - Research Methods for Public Health **OR** EOH 715 - Qualitative & Field Methods for Public Health

AND two of the following:

EAB 733 - Survey Sampling for the Health Sciences

EAB 743 - Experimental Design for the Health Sciences

EAB 753 - Nonparametric Statistics for Public Health

EAB 763 - Linear Statistical Models

EAB 773 - Survival Analysis for Public Health

EAB 783 - Multivariate Methods for the Health

Sciences

EAB 783 - Multivariate Methods for the Health

Sciences

Epidemiology and Biostatistics Students are required to take the following classes:

Epidemiology 2

Chronic Disease Epidemiology -

Students will choose two of the following:

Cancer Epidemiology Epidemiology of Obesity Social Epidemiology

Studente his chavera research requirement control comprised of 3 edites the first of the ilist below:

EABP/OB HREscarEss Schribbs of Occ Public of the little alth OR BOB F11777 Qualitatione stra Field of Miss thinks Hoggiene Public Health

PUBH 781 - Env-Occup Health Risk Assessment

AND two of the following:

EAB 733 - Survey Sampling for the Health Sciences

EAB 743 - Experimental Design for the Health Sciences

EAB 743 - Experimental Design for the Health Sciences

EAB 753 - Nonparametric Statistics for Public Health

EAB 763 - Linear Statistical Models

EAB 773 - Survival Analysis for Public Health

EAB 783 - Multivariate Methods for the Health Sciences

Health Services Management and Policy Students will select four courses from the list below:

HCA 703 - Management of Health Service

Organizations and Systems

HCA 652 - Health Care Politics and Policy

HCA 704 - Health Care Economics

HCA 705 - Health Care Accounting and Finance

HCA 706 - Strategic Management of Health Services

HCA 707 - Operations and Quality Management of Health Services

HCA 708 - Information Systems in Health Services Management

HCA 710 - Human Resources Management of Health Care Organizations

HCA 711 - Advanced Health Care Finance

Students also have a research requirement comprised of 4 courses from the list below:

HCA 715 - Health Services Research Methods

EOH 715 - Qualitative & Field Methods for Public Health

Plus two classes from the following list:

EAB 733 - Survey Sampling for the Health Sciences

EAB 753 - Nonparametric Statistics for Public Health

EAB 763 - Linear Statistical Models

EAB 773 - Survival Analysis for Public Health

EAB 783 - Multivariate Methods for the Health Sciences

ECO 772 - Econometrics II

MBA 767 - Market Opportunity Analysis

Dissertation

Additionally, all candidates will complete a minimum of 21 dissertation credit hours or 18 dissertation

credit hours plus 3 credit hours of Prospectus as specified in the student's advising plan.

Program Completion Requirements

1. Credit Hours and Grade point Average

A grade point average of at least a 3.0 must be maintained in all courses required for the degree; no grade less than a B in any course is acceptable for curricular completion of the program.

2. Comprehensive Examination: Test of Core Subject Matter of Program

All students are required to complete a written Comprehensive Examination upon completion of the core courses of the program. The examination is designed to assess the student's ability to synthesize knowledge, as demonstrated by the selection and integration of information from several doctoral courses and is evaluated by written discussion in response to examination questions. The Comprehensive Examination may only be repeated once and must be repeated within one semester of the initial attempt. Students unable to pass the Comprehensive Examination after a second attempt will be separated from the program.

After successful completion of the Comprehensive Exam the student must establish a Dissertation committee. The committee will include at minimum, a Chairperson with expertise in the student's Area of Emphasis; two additional committee members from the School of Community Health Sciences; and, a Graduate College Representative. Students may also elect to add approved, external committee member with expertise in the student's selected area of emphasis.

3. Qualifying Examination

Upon completion of all required course work other than dissertation, each student must take oral Qualifying Examination that will focus on those areas of knowledge most relevant to the student's dissertation topic. Qualifying examinations may only be repeated once and must be repeated within one semester of the initial attempt. If a student fails a second attempt, the student will be separated from the program.

4. Dissertation Prospectus

Upon successful completion of the Qualifying examination, the student will present a dissertation prospectus to his/her committee and an oral presentation to peers and faculty. The prospectus is a written and oral presentation of the students dissertation research plan. The written prospectus should be the equivalent of the first three chapters of the dissertation. The oral presentation is a public

presentation of the research plan. The prospectus becomes the agreement for the student's dissertation research. Upon approval of the prospectus, the student advances to candidacy, can register for dissertation credits, and begin their independent research.

5. Final Oral Examination

Upon completion of the dissertation, the student must pass a final oral examination that involves the public presentation and successful defense of their dissertation study. All advisory committee members must be present for the final defense and may question the student following presentation of the study. The defense will be scheduled and conducted in accordance with the Graduate College/ School's policies for dissertation completion. It is the student's responsibility to file all required forms and written materials with the Graduate College in a timely manner.

Environmental & Occupation Health

Chair

Gerstenberger, Shawn (1997) Professor and Chair of Environmental and Occupational Health; B.S. University of Wisconsin-Platteville; M.S., PhD. University of Illinois.

Graduate Faculty

Bungum, Timothy

(2001) Associate Professor of Biostatistics and Epidemiology; B.A. Luther College; M.S., DPH University of South Carolina.

Buttner, Mark P.

(1989) Associate Professor of Environmental and Occupational Health; B.S. University of Wisconsin; M.S. University of Nevada Las Vegas, PhD University of Nevada Reno.

Chino, Michelle

(2000) Associate Professor of Environmental and Occupational Health, B.S., M.S., PhD. University of New Mexico.

Cross, Chad

(2005) Associate Professor of Biostatistics and Epidemiology; B.S., Purdue University; M.S., PhD. Old Dominion University.

Cruz, Patricia

(1995) Associate Professor of Environmental and Occupational Health, B.S. University of Puerto Rico, M.S. University of Central Florida, PhD. University of Nevada Reno.

Dodge Francis, Carolee

(2007) Assistant Professor of Environmental and Occupational Health; B.S., M.A., Ed.D., University of St. Thomas.

Moonie, Sheniz

(2006) Assistant Professor of Biostatistics and Epidemiology, BS University of California San Diego; MS California Polytechnic University, Pomona; PhD Saint Louis University

Stetzenbach, Linda

(2005) Professor Emeritus of Environmental and Occupational Health; B.S., M.S., PhD. University of Arizona.

Thompson-Robinson, Melva

(2004) Associate Professor of Environmental and Occupational Health, B.S. University of Michigan, M.S., Ohio University, D.P.H. University of South Carolina.

Wong, David

(2008) Associate Research Professor. B.Sc., M.Sc. Ocean University of Qingdao, PhD. City University of Hong Kong.

The mission of the Department of Environmental and Occupational Health is to advance the health of all people in the United States and around the world through research and training in environmental health. The department emphasizes the role of air, water, the home environment, and the workplace as critical determinants of health.

Program

Public Health Ph.D.

Course Descriptions

EOH 702 - Community Based Participatory Research Methods

Credits 3

Teaches the philosophy and methods of community based participatory research. Focus on traditional research methods and their application to community health research as well as strategies for developing research partnerships, community consent, and essential competencies for research with diverse communities.

EOH 705 - Social Epidemiology

Credits 3

Focuses on the social determinants of health and the health implications of social phenomena such as class, discrimination, and work. Students will examine life course hypotheses and the impact of early exposure to disease in later life as well as intervention strategies that incorporate social change elements. Prerequisite: Core epidemiology class.

EOH 709 - Scientific/Technical Writing for the Health and Life Sciences

Credits 3

Technical writing skills are critical to success in publication of scientific journal articles, approval of research grant submissions, and acceptance of thesis/dissertation requirements. In this course students will study techniques and develop skills in technical writing useful to professionals in health care and life sciences.

EOH 710 - Fundamentals of Public Health Credits 3

Introduces students to public health concepts and practice. Provides broad overview of the field of public health and focused look at core areas of health promotion and education, environmental health, epidemiology and bio statistics, and health care administration in the public health arena.

EOH 711 - Diseases that Changed the World Credits 3

Human disease has played a significant role in social and political changes worldwide. In this course students will study the impact of people and disease on historical events, and present written and oral discussions of selected topics including how these events impact public health.

EOH 713 - Public Health Law

Credits 3

Examines the history of public health law and the role, authority and limitations of government to enact and enforce such laws. Students will examine the development of public health laws and the relationship between government entities in carrying out the laws.

EOH 715 - Qualitative & Field Methods for Public Health

Credits 3

This course will provide students with the content/skills needed to conduct community-based participatory field research. This course will explore several topics related to qualitative research: theoretical aspects of qualitative research, negotiating community, designing the study, ethnographic observations, triangulating data, and writing a field study report.

EOH 717 - Food Safety and Public Health Credits 3

Foodborne illness has a significant impact on public health. In this course students will study microbiological and chemical aspects of food safety including factors that affect growth or organisms in food and production of toxins that can result in foodborne illness.

EOH 732 - Children, Development, Health, and the Environment

Credits 3

Focuses on health issues specific to children age 0-18, such as abuse and neglect, insurance, nutrition, immunization, mental health, substance abuse, sexuality and chronic disease. Students will examine the unique status of children in the public health

system as well as systemic approaches to improving services and policies. **Prerequisites**: MPH core classes.

EOH 735 - Outbreak Investigation

Credits 3

Students will work through simulated outbreak situations, culminating in a lengthy simulation of an outbreak. Students will be responsible for all aspects of the investigation including report writing. Through partnership with community health agencies, students will have the opportunity to assist in actual outbreak investigations occurring during the semester.

EOH 740 - Fundamentals of Environmental Health

Credits 3

This course will address chemical, physical and biological factors in the environment and their relationship to the health of the human population.

EOH 745 - Epidemiology & Biostatistics Credits 3

Students will explore systems currently in place, both in the United States and internationally, and will learn methodology used to analyze surveillance data. Students will learn about the effective surveillance systems through lecture and case studies of existing surveillance systems. **Prerequisites**: HED 725/EAB 705 or equivalent

EOH 747 - Transmission of Infectious Disease Credits 3

Exposure to disease causing microorganisms occurs via inhalation, ingestion, and dermal contact. Students will study transmission of selected microorganisms via the air, water, food, vectors, and person-to-person contact.

EOH 757 - Parasitology and Public Health Credits 3

Parasitic infections resulting from exposure to parasites that invade the intestine, blood, or tissues of humans can result in serious disease. This course will discuss a variety of human parasites, resulting disease, and treatment and control strategies to minimize exposure and health impacts.

${\bf EOH~760}$ - Racial and Ethnic Disparities in Health Credits 3

Explore the causes of health disparities and potential remedies for health-related inequities that associate with race, ethnicity, social class and culture. Students will develop skills necessary to recognize personal and institutionalized bias which interferes with

clinical decision-making, health policy, and health system structural development.

EOH 765 - Seminar in Environmental Justice and Public Health

Credits 3

Explores the impact of environmental hazards on community health and examine strategies for developing justice resources and effective policy change. Students will examine actual cases and their health and policy outcomes. Focus on community based strategies for research, advocacy, and environmental change. Prerequisites: EOH and MPH core classes.

EOH 766 - Biological Invasions and **Environmental Health**

Credits 3

This class covers topics with regard to the human introduction, impacts, and prevention of invasive species to environmental health, such as invasion theory, species distinction, ecosystem health, social and economic impacts, invasive species control and management.

EOH 767 - Bioaerosols and Human Health

Credits 3

Bioaerosols are biological materials that can elicit adverse health effects when humans are exposed in indoor and outdoor environments. This course will present the physical and environmental parameters that affect the dispersal, transport, and survival of bioaerosols, detail specific bioaerosols of concern, and discuss the human health impacts of exposure.

EOH 769 - Advanced Pollution Ecology

Credits 3

This course will address the major effects of pollution on aquatic organisms and ecosystems. **Prerequisites**: EOH 740 or permission of instructor.

EOH 775 - Injury Epidemiology

Credits 3

This course will teach students about the epidemiology of intentional and unintentional injury. The course will include the basic concepts of injury prevention, injury surveillance, strategies for injury control, developing injury prevention programs, and designing injury research and evaluation.

Prerequisites: Core Epidemiology and Research Methods.

EOH 777 - Emerging Infectious Disease

Credits 3

Re-emerging and newly recognized/emerging infections diseases are having a significant on public health world-wide. This course will present a variety of new diseases resulting from exposure to emerging and re-emerging microbial pathogens and suggested treatment and control strategies to minimize exposure and health impacts.

EOH 790 - Doctoral Seminar

Credits 3

This is an advanced seminar course directed by members of the Department of Environmental and Occupational Health and the Epidemiology and Biostatistics Program. Seminars will be facilitated by faculty members based on their particular areas of research interest and expertise. Notes: S/U grading only.

EOH 793 - Internship in Environmental Health

Credits 1 - 3

The environmental internships is one of the capstone experiences for the MPH degree and is intended to provide students with applied work experience in a local agency, organization, center or institute. **Notes**: May be repeated to a maximum of six credits. Prerequisites: Admission to the School of Public Health or consent of instructor.

EOH 794 - Professional Paper in Environmental Health

Credits 3

This capstone experience provides the opportunity for a graduate degree candidate to be involved in an in-depth project either written or experimental in nature. A formal paper and presentation describing the project culminate this experience. Notes: May be repeated to a maximum of six credits. **Prerequisites**: Admission to the School of Public Health or consent of instructor.

EOH 795 - Special Topics in Public Health

Credits 3

Selected topic of current interest not covered in any existing courses in environmental and occupational health. Notes: May be repeated to a maximum of three credits. Prerequisites: Admission to the School of Public Health or consent of instructor.

EOH 796 - Independent Study in Environmental Health

Credits 1 - 3

Independent study of a selected topic in Environmental and Occupational Health. Notes: May be repeated to a maximum of six credits.

Prerequisites: Admission to the School of Public Health or consent of instructor.

EOH 798 - Thesis Research

Credits 1 – 6

Notes: May be repeated, but a maximum of six credits will apply towards the student's degree program. Grading: S/F grading only.

EOH 799 - Dissertation

Credits 3-6

Dissertation in Environmental and Occupational Health. Notes: May be repeated to a maximum of 12

credits. Prerequisites: PhD standing

Health Care Administration & Policy

Chair

Moseley, Charles (1991) Associate Professor of Health Care Administration; Ph.D., Virginia Commonwealth University.

Graduate Coordinator

Cochran, Christopher (1997) Associate Professor of Health Care Administration; B.A. University of Texas, El Paso; M.P.A., Ph.D., University of South Carolina.

Graduate Faculty

Ginn, Gregory (2000) Associate Professor of Health Care Administration; B.A., M.Ed., MBA, Ph.D., University of Texas, Austin.

Shen, Jie (2006) Associate Professor of Health Care Administration and Policy; Ph.D., Virginia Commonwealth University.

The Health Care Industry is one of the three largest industries in the United States based on revenues, total assets or number of employees. Opportunities for employment in health care organizations are abundant in the Las Vegas Valley.

Job opportunities occur in the following types of organizations:

> Hospitals Ambulatory facilities care Long-term facilities care Medical practices Insurance companies Public health agencies Mental health programs organizations Managed care Community health programs

Students in the Health Care Administration M.H.A. gain a broad view of the health care delivery system and develop an understanding of health and disease. They develop analytical skills through the curriculum and internships to prepare them for leadership positions in the organization, financing, and delivery of health care services.

Program

Health Care Administration M.H.A.

Health Care Administration M.H.A.

The Master of Health Care Administration Degree Program is the only graduate Health Care Administration program in the Nevada Public University System (NSHE). The MHA will prepare students to assume leadership roles in health care organizations. The degree is recognized in the health care field as an important credential that allows graduates to assume health care management positions. The curriculum is developed to include all the critical competencies for health care leadership, including issues of health care delivery, health care finance, ethical and legal issues in health care administration and management topics. Students and faculty will contribute though research and service to the knowledge and applications of management in health care; and they will use their education and expertise to help meet the health care management needs of the State of Nevada and beyond.

Admission Requirements

To be considered for admission, an applicant must meet Graduate College standards and:

- 1. Hold a bachelor's degree or recognized equivalent from a regionally accredited institution. A criterion for admission is at least a B (3.0) grade point average, or equivalent in work completed after the first two years of a bachelor's degree program, and in all post-baccalaureate course work. An applicant who does not meet this academic criterion may request special consideration.
- 2. Submit a one to two page personal essay describing why they want to pursue a career in health care management
- 3. Submit three letters of recommendation
- 4. Submit a resume
- 5. In addition, a satisfactory score on the Test of English as a Foreign Language (TOEFL) is required for applicants whose first language is not English.

MHA required courses

The Master of Health Care Administration HCA/MHA degree has a 45 credit required core (48 credits if the student chooses to complete a thesis to meet the capstone requirement). The following courses constitute the required core:

HCA 701 - U.S. Health Care System: Programs and Policies

- HCA 702 Epidemiology in Health Services Management
- HCA 703 Management of Health Service Organizations and Systems
- HCA 704 Health Care Economics
- HCA 705 Health Care Accounting and Finance
- HCA 706 Strategic Management of Health Services
- HCA 707 Operations and Quality Management of Health Services
- HCA 708 Information Systems in Health Services Management
- HCA 709 Health Care Administration Capstone
- HCA 710 Human Resources Management of Health Care Organizations
- HCA 713 Internship in Health Care Administration
- HCA 715 Health Services Research Methods
- HCA 761 Health Care Law and Ethics for Managers
- HCA 799 Thesis Research
- EAB 703 Biostatistical Methods for the Health Sciences
- EOH 710 Fundamentals of Public Health

Health Promotion Program

Chair

Gerstenberger, Shawn (1997) Associate Professor and Chair of Environmental and Occupational Health; B.S. University of Wisconsin-Platteville; M.S., Ph.D. University of Illinois.

Graduate Coordinator

Thompson-Robinson, Melva (2004), Associate Professor; B.S., University of Michigan; M.S.P.E., Ohio University; Dr. PH., University of South Carolina.

Graduate Faculty

Bungum, Timothy (2001) Associate Professor of Biostatistics and Epidemiology; B.A. Luther College; M.S., D.P.H University of South Carolina.

Buttner, Mark P.

(1989) Associate Professor of Environmental and Occupational Health; B.S. University of Wisconsin; M.S. University of Nevada Las Vegas, PhD University of Nevada Reno.

Chino, Michelle

(2000) Associate Professor of Environmental and Occupational Health, B.S., M.S., Ph.D. University of New Mexico.

Cochran, Christopher

(1997) Associate Professor of Health Care Administration and Policy; B.A. University of Texas, El Paso; M.PA., Ph.D. University of South Carolina.

Cross, Chad

(2005) Associate Professor of Biostatistics and Epidemiology; B.S., Purdue University, M.S., Ph.D. Old Dominion University.

Dodge Francis, Carolee

(2007) Assistant Professor of Environmental and Occupational Health; B.S., M.A., Ed.D., University of St. Thomas.

Ginn, Gregory

(2000) Associate Professor of Health Care Administration and Policy; B.A., M.Ed., MBA, Ph.D. University of Texas, Austin.

McNab, Warren

(1979), Professor; B.S., M.S., Mankato State University; Ph.D., Southern Illinois University.

Moonie, Sheniz

(2006) Assistant Professor of Biostatistics and Epidemiology, BS University of California San Diego, MS California Polytechnic University, Pomona, PhD Saint Louis University

Moseley, Charles

(1991) Associate Professor and Chair of Health Care Administration and Policy; Ph.D. Virginia Commonwealth University.

Regin, Charles

(1987), Assistant Professor; B.S., M.S., University of Wisconsin-La Crosse; Ph.D., Southern Illinois University at Carbondale.

Shen, Jie

(2006) Associate Professor and Chair of Health Care Administration and Policy; Ph.D. Virginia Commonwealth University.

Wong, David

(2008) Associate Research Professor. B.Sc., M.Sc. Ocean University of Quingdao, PhD. City University of Hong Kong.

Master of Education in Health Promotion

The goal of the 36-semester credit hour Health Promotion graduate program is to provide students with the theory, knowledge, and skills needed to integrate the principles of health promotion into a variety of community, research, clinical, business or school settings and/or to pursue advanced study. Specifically, the Health Promotion degree program will prepare students to: 1) assess and communicate individual, family, and community needs, 2) plan, implement, evaluate, and administer programs, 3) act as a resource person by coordinating provisions for services and applying appropriate research principles and methods, and 4) advance the goals of job-related professional organizations. To this end, eight concentrations in the Health Promotion degree are offered.

The **Administration** concentration is designed for those interested in assuming leadership roles in their organization such as health program planners, health care project specialists, or health officers. The Communication concentration is designed for individuals interested in the dissemination of health promoting information and skills through varied strategies leading to health media specialist or health communication expert occupations.

The **Counseling** concentration is designed for anyone wishing to assist others one on one or in small groups regarding effective and positive strategies dealing with critical health issues. Such professionals include, but are not limited to, employee assistance program educators, patient educators, or mental health counselors.

The **Education** concentration is designed to improve the delivery skills of any educator at any teaching level, at varied sites such as school health teachers, public health educators, and employee wellness associates.

The **Environmental Health** concentration is designed for those individuals seeking occupations such as health and safety specialists or environmental health consultants due to an interest in the relationship that exists between the physical environment and the health of individuals and groups in that environment.

The **Gerontology** concentration is designed for individuals who are interested in health promotion strategies geared specifically for older adults

delivered through professional roles such as gerontology outreach workers or program planners for seniors.

The **Nutrition and Fitness** concentration is designed for those interested in the fields of corporate health promotion or personal wellness training who desire to advise individuals and groups regarding eating choices and activity regimens to enhance performance and health.

The **Interdisciplinary** concentration, clearly the most flexible, is designed for those students with specific needs who would be best served by selecting a myriad of graduate courses from across campus. Individuals such as school nurses, epidemiologists, and industrial hygienists could benefit from the individualized approach offered in this concentration.

Admission Requirements

In addition to meeting the admission requirement of the Graduate College as outlined in the front of this catalog, applicants must also meet the requirements established by Department of Health Promotion faculty.

- Interested applicants to the Master of Education degree in Health Promotion should have an undergraduate major in any health or allied health academic discipline. If admission is sought by students who have not earned a major described above, up to credits of additional HED 600-level course work may be required. These deficiencies do not count toward degree requirements.
- Applicants must have a minimum overall undergraduate grade point average (GPA) of 3.00 on a 4.00 scale during their last 60 credits of undergraduate work.
- An application for admission must be obtained from the Graduate College. Official transcripts of all colleges and universities attended should be submitted to the Graduate College and Department.
- 4. Two letters of recommendation, a two-page statement of professional goals, and a current vita should be submitted directly to the Department of Health Promotion.

Applications are processed when all credentials required by both the Graduate College and the Department of Health Promotion have been received and evaluated. The Graduate College will officially notify students of their acceptance. Additionally, the Department of Health Promotion staff will notify students of their advisor, who will work with the student to develop the individual plan of study.

Application deadlines include: March 15 for summer enrollment, July 1 for fall enrollment, and November 15 for spring enrollment.

For details of the Master of Public Health program, please see the School of Public Health information. The Department of Health Promotion offers the Master of Education (Health Promotion M.Ed.) a Master of Public Health (Public Health M.P.H.) degrees with an emphasis in Health Promotion.

Program

• Health Promotion M.Ed. (Discontinued)

Course Descriptions

HCA 701 - U.S. Health Care System: Programs and Policies

Credits 3

Examines the manpower, financing and major service components of the US health care system. Addresses major issues of health care access, costs, and quality of care. Special emphasis on the role of government regulation and public policy in the system.

Prerequisites: Graduate standing.

HCA 702 - Epidemiology in Health Services Management

Credits 3

Examination and synthesis of concepts and an application of methods appropriate to epidemiology from a managerial perspective.

HCA 703 - Management of Health Service Organizations and Systems

Credits 3

Theories and practice of the management of health services. Analysis and evaluation of the management functions and roles, organizational theories and behavioral perspectives and health care policy issues as they apply to health services management.

HCA 704 - Health Care Economics

Credits 3

Application of economic theory to study of health markets and institutions. Impact of insurance on demand for and supply of health care analyzed. Competition and regulation as forces in health care industry discussed from an economic perspective. **Prerequisites**: Three hours undergraduate microeconomics or consent of instructor.

HCA 705 - Health Care Accounting and Finance Credits 3

Introduction to financial and managerial accounting

in the context of the health care industry. Also introduces concepts from finance for use in the decision making process. **Prerequisites**: Admission to the MPH program, MHA program, or consent of instructor.

HCA 706 - Strategic Management of Health Services

Credits 3

Emphasis on concepts of strategic and operational management for health care organizations. Also covers managerial epidemiology and marketing. Utilizes case studies. **Prerequisites**: HCA 705

HCA 707 - Operations and Quality Management of Health Services

Credits 3

Introduces concepts of operations management in the context of the health care industry. Covers analytical techniques in the context of quality management. **Prerequisites**: Graduate standing.

HCA 708 - Information Systems in Health Services Management

Credits 3

Understanding of computerized needs of health services managers. Examines decision making process, information needs of various decisions and how "decision support systems" meet these needs. Major types of information systems examined, include financial, patient care & strategic management systems. **Prerequisites**: Graduate standing.

HCA 709 - Health Care Administration Capstone Course

Credits 3

Capstone experience provides the Health Care Administration graduate degree candidate the option to select one of the following: an indepth project or a comprehensive examination. **Notes**: The project option requires a formal paper and a presentation. **Grading**: S/F grading only. **Prerequisites**: Last semester in program or consent of instructor.

HCA 710 - Human Resources Management of Health Care Organizations

Credits 3

Covers structural and behavioral systems and human resources process systems. Taught from the perspective of strategic management and in the context of the legal environment for health care organizations.

HCA 711 - Advanced Health Care Finance Credits 3

Further study of financial management in the context of the health care industry. **Prerequisites**: HCA 705 or the equivalent.

HCA 713 - Internship in Health Care Administration

Credits 3 - 6

Provides students with an applied work experience in a local health services organization. Course is faculty supervised and requires written reports and other structured assignments. **Notes**: May be repeated to a maximum of six credits. **Prerequisites**: Consent of instructor.

HCA 715 - Health Services Research Methods Credits 3

Course examines health services research concepts and methods. Topics include: health services research relevance; research study conceptualization; research design, operationalization and analysis; and the review of the health services research literature. Emphasis on research relevant to the practice of health care management. **Prerequisites**: EAB 703

HCA 761 - Health Care Law and Ethics for Managers

Credits 3

Course examines legal and ethical issues that impact health care management. Topics include: liability, contract and antitrust law; employee and labor law, professional relations, and ethical issues regarding; beginning and end of life, patient rights, medical research, access to care; conflict of interest, and confidentiality.

HCA 798 - Independent Study

Credits 1 - 3

Independent study in a specific area of student interest under the direction of a faculty member.

Notes: May be repeated to a maximum of six credits.

Grading: S/F grading only. Prerequisites: Consent of instructor.

HCA 799 - Thesis Research

Credits 3

Notes: May be repeated, but a maximum of six credits will apply towards the student's degree program. **Grading**: S/F grading only. **Prerequisites**: Consent of HCA& P Department Chair, graduate courses in research methodology and in statistics.

School of Dental Medicine

The UNLV School of Dental Medicine, which accepted its Inaugural Class in August of 2002, has been designed to serve our local community and the state of Nevada in oral health care, health services, research and scholarly activities. Education of dental students will be accomplished through a competency based curriculum with a special emphasis on biomedical sciences, professional studies and an innovative vertically integrated team approach for clinical instruction and delivery of patient care. The School of Dental Medicine is recruiting and employing a diverse and distinguished faculty to facilitate the program. The competency-based education program has at its core a student and patient entered environment designed to maximize learning and patient care delivery. Beginning dentists will be exposed to in depth studies of biological and clinical sciences as well as biomedical and bio-ethical disciplines. Students will encounter a broad spectrum of clinical experiences to prepare them for entry into the profession. These experiences will begin in year one of the curriculum, and clinical responsibilities will expand in scope and depth throughout the four years. During year four, students will have the opportunity to select placement in a variety of clinically supervised community settings. They will also have extensive exposure to business and financial management designed to meet the challenges of dental practice. Furthermore, they will be introduced to principles of research, will have an opportunity to conduct independent research and will be encouraged to pursue scholarly activities with the possibility of creating a career in academic dentistry. Training will occur in state of the art facilities designed to achieve the goals of the dental academic program. Today's dental professional needs a learning environment that offers interaction with other medical professionals and facilitates diagnosis and treatment to improve the patient's overall health. The dental school is adopting this new reality and keeping it at the forefront as it designs the teaching facility at the UNLV Shadow Lane campus. The building is part of a regional campus that is expected to house the university's biotech research center, including the UNLV Cancer Institute. Students will have access to the latest technology with other health care professionals in diagnosing disease and treating patients. By the time of graduation, students will be competent and confident to begin a rewarding career as a provider of comprehensive oral health care. For additional information, visit http://dentalschool.unlv.edu.

Karen P. West, Dean

(2006), D.D.M., University of Louisville; M.P.H., University of South Carolina.

Programs

- Business Administration & Dental Medicine Dual M.B.A./D.M.D.
- Doctor of Dental Medicine D.M.D.
- Oral BiologyOk M.S.

School of Nursing

Welcome to the School of Nursing at UNLV. Our nursing program is the oldest in southern Nevada and the only one in Nevada to offer a Ph.D. program. All of our graduate programs are web-based to allow for "anytime, anyplace" education, but may involve occasional visits to campus. In our Masters of Science program, there are currently three tracks, the Family Nurse Practitioner Track, the Pediatric Nurse Practitioner Track, and the Nurse Educator Track. We also offer post-masters certificates in these areas. Family Nurse Practitioners provide primary care for individuals across the lifespan and many provide care to the indigent and uninsured populations. Pediatric Nurse Practitioners provide primary care for infants, children, and adolescents. The Nurse Educator program prepares nursing students to teach nursing. This provides more qualified faculty so that all of the area nursing schools may increase their enrollment. The MS program is growing rapidly because of the great need for advanced practice nurses and nurse educators in Nevada.

We also offer a web-based Ph.D. program. This program is research-focused and will help meet the need for more highly qualified faculty in Nevada and the surrounding states. If you are considering a position as a nurse educator and researcher, this web-based program may meet your needs.

We are rapidly expanding our research activities and have a number of well-funded graduate assistant positions available for full time students. In this role, graduate students work closely with faculty on their research, teach undergraduate classes, or supervise students in the clinical setting. It is a wonderful opportunity to enhance your education. UNLV's School of nursing received full re-accreditation through the year 2010 from the National League for Nursing Accreditation Commission (NLNAC), the longest established accrediting body of nursing education programs in the country. It is the maximum period awarded by the NLNAC.

I encourage you to read the catalog and explore our website at to find out more about all of these programs and to visit us when you are in the Las Vegas area.

Carolyn Yucha, Dean Professor; BS SUNY Albany; MS SUNY Buffalo; Ph.D. SUNY, Health Sciences Center, Syracuse, NY.

Associate Dean for Academic Affairs

Smyer, Tish

(2006), Professor; BS, University of Arkansas Medical Center; MS University of California Los Angeles; DNSc University of California Los Angeles.

Associate Dean for Research

Schneider, Barbara St. Pierre (2006), Associate Professor; BS Louisiana State University; MN, University of Washington; DNSc, University of California Los Angeles.

Psychosocial Nursing Department Chair

Candela, Lori

(1999), Associate Professor; BS Metropolitan State College; MS, University of Colorado; Ed.D. University of Southern California.

Physiological Nursing Department Chair

Alpert, Patricia

(1991), Assistant Professor; B.S., M.S., M.P.H. University of Hawaii; D.P.H. Loma Linda University

MSN Coordinator

Maes, Cheryl

(2004), Lecturer; BS, MS University of Nevada, Las Vegas.

Ph.D. Coordinator

Clark, Michele

(2006). Associate Professor; B.S. University of California, San Francisco; M.S., Ph.D. University of Arizona

Graduate Faculty

Angosta, Alona

(2005). B.S.N, M.S.N. University of Nevada, Las Vegas; Ph.D. University of Hawaii

Bowles, Cheryl

(1984), Professor Emeritus; BS, MS, University of Illinois; Ed.D., Northern Illinois University.

Clark, Michele

(2006). Associate Professor; BS University of California San Francisco; MS, Ph.D. University of Arizona.

Cyrkiel, Dianne (2000), Lecturer; BS. Indiana University; MS University of Texas, San Antonio.

Kawi, Jennifer

(2007). B.S.N., Saint Louis University; M.S.N., University of Nevada, Las Vegas; Ph.D. University of Colorado, Denver

Kowalski, Susan

(1994) Assistant Professor Emeritus; B.S. Northern Illinois University; M.S. Boston College; M.B.A. Rockford College; Ph.D. Texas Women's University

Louis, Margaret

(1978), Associate Professor Emeritus; BS, MA, Bradley University; Ph.D. University of Texas, Austin.

Menzel, Nancy

(2006) Associate Professor; BS Cornell University; MS Boston University; Ph.D. University of South Florida.

Sabo, Carolyn

(1984), Professor; BS, MS University of Utah; Ed.D. Brigham Young University.

Tan, Rhigel

(2005). B.S.N., Cebu City Medical Center College of Nursing; MN, Cebu Normal University; D.N.P. Rocky Mountain University of Health Professions.

VanBeuge, Susan

(2006), Lecturer; BS Pacific Lutheran University; MS University of Nevada Las Vegas; D.N.P. University of Utah

Xu, Yu (Philip)

(2005), Professor; B.A., Henan University; M.S., University of South Alabama; Ph.D., SUNY Buffalo.

The master's program has full accreditation by the Commission on Collegiate Nursing Education (CCNE) from 2008 until 2014. The Master of Science in Nursing Graduate program is designed to provide students pursuing a career in nursing the opportunity to acquire the knowledge, skills and abilities requisite to the safe, effective and efficient practice of nursing. The M.S.N. program currently offers the opportunity to become a nurse practitioner (NP) or a nurse educator.

The Ph.D. in Nursing Graduate program is designed to achieve the following program outcomes:

- Provide leadership in the advancement of nursing as an academic and practice discipline and in political processes that affect nursing and health care.
- Conduct original research that generates new knowledge.

• Develop, implement and evaluate innovative approaches to teaching and learning.

R.N. to M.S.N. Pathway

Through a collaborative agreement with Nevada State College, registered nurses with an associate's degree or diploma are eligible to apply to take UNLV SON graduate courses as a special student. These courses count toward completion of a B.S.N.. This collaboration shortens the graduate pathway by 9 credits. Upon B.S.N. completion, the student is eligible to apply for one of the pathways in the graduate program. Applicants must meet all current requirements of admission into one of the pathways in the graduate program. For more information, please contact Nevada State College School of Nursing.

Transfer of Credit

The Graduate College evaluates transcripts and determines the credits acceptable to the university. The Graduate Admissions Committee determines the credits that may be applied toward the satisfaction of degree requirements for the Master of Science in Nursing. A limited number of graduate courses taken prior to admission to UNLV may be used in an advanced degree program. The courses must: a. Be approved by the Graduate Admissions Committee. b. Have been taken at an accredited institution. c. Have been completed with a grade of B or higher; B- is not acceptable. d. Upon recommendation of the Graduate Dean, be posted on the student's official UNLV transcript. e. Duplicate or excess credit is not counted toward a UNLV graduate degree.

The actual number of transfer credits accepted is determined when the Proposed Degree Program is filed after admission. No more than seven credits may be accepted. A six-year completion rule applies to all course work utilized in completion of the degree. The date of the first transfer class utilized to fulfill the degree requirements begins the allowed six calendar years.

Graduates of Baccalaureate Programs from Foreign Countries

Since schools of nursing in foreign countries do not have the opportunity to achieve accreditation by the National League for Nursing Accrediting Commission or the Commission on Collegiate Nursing Education, students graduating from those schools will be exempt from meeting that one criterion for admission. Students will only be accepted on a full admission status, rather than a non-admitted or provisional status.

Post-Master's Certificate

Individuals who already have a master's degree in nursing and meet the admission qualifications may complete a Post- Master's Certificate for an FNP or Nurse Educator. No degree will be awarded, but a certificate documenting completion of the course work will be provided and transcripts showing completion of the courses will be available.

Advisement

Academic faculty advisors are assigned to all entering students for program planning. At the time the student selects his/her examination committee, the committee chairperson becomes the student's official advisor. Students must complete the Proposed Program of Study Form by the end of the second semester of full-time study or the semester after they have achieved 16 credits.

Programs

- Nursing M.S.N.
- Doctor of Nursing Practice
- Nursing Ph.D.
- Post-Masters Family Nurse Practitioner Certificate
- Post-Masters Nursing Education Certificate
- Pediatric Nurse Practitioner Certificate Display Courses

Doctor of Nursing Practice

The Doctor of Nursing Practice (DNP) is a terminal professional practice degree. The goal of the collaborative University of Nevada at Reno and Las Vegas, UNDNP program is to prepare nurses to assume leadership roles in clinical practice, administration, clinical teaching, and clinical research. The DNP differs from the PhD in Nursing or Doctor of Nursing Science degrees, emphasizing advanced clinical practice, implementation of best practices, and evaluation of practice and care delivery models rather than individually initiated research. The UNDNP program prepares graduates for advanced clinical practice and leadership roles to serve the health care needs of the people of Nevada, the nation, and the professional community. DNP graduates are equipped to assume a wide range of leadership roles in both direct and indirect health care settings. DNP graduates may function as specialists in their advanced practice clinical roles, nursing faculty, or as healthcare executives, program and policy analysts.

Program Objectives

The goal of the DNP degree is to prepare nurses to assume leadership roles in clinical practice, clinical teaching, and health care analysis.

DNP Program Objectives. At the conclusion of the University of Nevada DNP program, graduates will:

- Provide advanced nursing care to improve patient and population health care outcomes in various direct and indirect settings.
- 2. Take leadership roles in the analysis, delivery and management of nursing care and health care systems.
- 3. Provide evidence-based practice through the application of analytical methods, information systems technology, and clinical research.
- Collaborate with interprofessional teams to meet the healthcare needs of culturally and ethnically diverse individuals and populations.
- 5. Act as change agent, leader, and advocate in the design, implementation, and evaluation of health care policy as it affects populations and the nursing profession.

Admission Requirements

Nurse Executive Track:

- Hold a baccalaureate in nursing from an accredited NLNAC or CCNE nursing program.
- 2. Students must hold a master's degree in nursing (MSN or MN). Exceptions to this will be made on a case-by-case basis and only for those students who hold a Bachelor of Science in Nursing with a master's degree in another health-related field (i.e. MBA, MHA, MPH etc.). Coursework from nonnursing master's degree must have significant content from nursing or a nursing focus. At a minimum, graduate level coursework must demonstrate a substantial study of Nursing Theory, Research, and Health Policy.
- 3. Have a cumulative grade point average (GPA) of 3.5 or higher at the graduate level.
- 4. Have completed graduate-level course work with a grade of B or better in nursing theory, research and healthcare policy.
- 5. Hold an unencumbered license as a registered nurse.
- Hold national certification or eligibility for certification reflective of advanced practice in a leadership role from a nationally recognized certification/credentialing organization.

7. Provide documentation of at least 500 hours of practice in a leadership role from educational experience, practice experience or equivalent course work in the area of administration, e.g., MBA, MHA, MPH, etc.

Advanced Practice Track:

- Hold a baccalaureate in nursing from an accredited NLNAC or CCNE nursing program.
- 2. Hold a master's degree in nursing (MSN or MN). Exceptions to this will be made on a case-by-case basis and only for those students who hold a Bachelor of Science in Nursing with a master's degree in another health-related field (e.g., MPH, MHA, etc.). Coursework from non-nursing master's degree must have significant content from nursing or a nursing focus. At a minimum, graduate level coursework must demonstrate a substantial study of Nursing Theory, Research, and Health Policy.
- 3. Have completed graduate-level course work with a grade of B or better in advanced pathophysiology, pharmacology, physical assessment, nursing theory, research, and healthcare policy.
- 4. Have a cumulative grade point average (GPA) of 3.5 or higher at the graduate level.
- 5. Have completed graduate-level course work with a grade of B or better in nursing theory, research and healthcare policy.
- 6. Hold an unencumbered license as a registered nurse and as an advanced practice nurse commensurate with state licensure.
- Hold national certification in an advanced practice role from a nationally recognized certification/credentialing organization.

Degree Requirements

A minimum of 39 graduate credit hours is required for both the advanced practice and nurse executive options. Students must complete the 39 credits of the degree program with a GPA of 3.0 or higher. All courses must be completed with a grade of B or better. B- is considered failing. Only two courses may be repeated and they must be passed by a grade of B or higher.

Students in the **Advanced Practice Option** must complete the following coursework:

Advanced Practice Option: 39 Credits

NURS 719R - Health & Public Policy for Advanced Practice of Nursing

NURS 725 - Scientific Underpinnings of the DNP in Advanced Practice Nursing

NURS 728R - Analysis of Health Organizations NURS 729R - Translational Evidence for Healthcare Systems

NURS 732 - Economics of Healthcare Delivery

NURS 745 - Healthcare Information Systems & Technology

NURS 765 - DNP Residency

NURS 767 - Collaboration, Communication &

Negotiation for the Nurse Leader

NURS 768 - DNP Forum & Role Transformation

NURS 772 - The Nurse as Leader

NURS 778 - Geographic Information Systems for Health

NURS 786 - DNP Project: Planning

NURS 787 - DNP Project: Implementing

NURS 788 - DNP Project: Defense

NURS 792 - Outcomes Management & Performance

Improvement in Nursing

Students in the **Nurse Executive Option** must complete the following coursework:

Nurse Executive Option: 39 Credits

NURS 719R - Health & Public Policy for Advanced Practice of Nursing

NURS 725 - Scientific Underpinnings of the DNP in Advanced Practice Nursing

NURS 728R - Analysis of Health Organizations

NURS 729R - Translational Evidence for Healthcare Systems

NURS 732 - Economics of Healthcare Delivery

NURS 745 - Healthcare Information Systems & Technology

NURS 763 - Management Strategies for Nursing & Healthcare Systems

NURS 765 - DNP Residency

NURS 767 - Collaboration, Communication &

Negotiation for the Nurse Leader

NURS 768 - DNP Forum & Role Transformation

NURS 772 - The Nurse as Leader

NURS 786 - DNP Project: Planning

NURS 787 - DNP Project: Implementing

NURS 788 - DNP Project: Defense

NURS 792 - Outcomes Management & Performance

Improvement in Nursing

Each student, upon admission, will be assigned an advisor. The advisor (and later the Advisory Committee including the chair of the Advisory committee if in place) will plan the student's entire degree program of study and submit it to the Graduate College by the end of the second semester of enrollment. The degree program requires the approvals of the student, advisor, and the DNP Credits Coordinator, the appropriate academic dean, and the Graduate Dean.

Progression and Policies

The Advisor monitors the student's progress through the program of study. In addition, the DNP Coordinator will monitor the student's progress, including adherence to all established policies of the Graduate College. At any given time, the student can request a change of advisor or chair of Advisory Committee. However, it is the student's responsibility to secure approval of an individual faculty member who agrees to serve as his or her advisor before changing the original advisor, subject to Graduate College approval. Also, it is the student's responsibility to make sure that his or her chosen advisor or chair has current full graduate faculty status at UNLV, which can be checked at: http://graduatecollege.unlv.edu/facstaff/status.html. Progression in the program is based on the UNLV School of Nursing Policy

To progress in the UNDNP program at UNLV, students must*:

- Maintain a cumulative grade point average of 3.00 or above each semester enrolled.
- Receive a grade of "B" (3.00) or above in all required cognate and nursing courses. If less than a "B", for example a B- (2.7) is earned, the course must be repeated. The student must be in good standing to repeat a course and any required course may be repeated only time.
- A student may register for a course only two times. A student who has registered for the same course twice and has withdrawn or received a grade less than "B" is ineligible for readmission unless approved by the Graduate College.
- 4. If a student fails two courses or has withdrawn from two courses or received a grade less than "B" in two courses he/she is ineligible for readmission unless approved by the Graduate College.
- 5. Complete a minimum of six (6) semester hours in each calendar year.
- 6. Continuously register for three (3) semester hours of credit each semester while working on the thesis, capstone, professional paper, or research utilization project. (DNP students complete a capstone project unique to the program.)

7.

*Students in the UNDNP program are required to abide by the policies for UNLV School of Nursing and UNR Orvis School of Nursing. Students in the UNDNP program are also required to abide by the policies of the UNLV Graduate College and University as well as the UNR Orvis School of Nursing and UNR Graduate College.

Capstone Project

The capstone project is a culmination project based on guidelines from the American Association of Colleges of Nursing (AACN) DNP essentials. This is a project completed over semesters 2, 4 and 5 in the program. Students must complete each semester of the capstone project to progress in the program. Each student will create, present and defend a capstone proposal in the 2nd semester. This must be successfully completed in the semester to progress. Students will complete a project, write a final paper and defend the project in the 5th semester with full committee approval obtained for graduation from the UNDNP program according to the individual 'home' school Graduate College (UNLV and UNR) requirements.

Progression in the capstone experience from each course (NURS 786 to NURS 787 to NURS 788) must be completed in order. For students who do not progress in the stated progression, the UNDNP Capstone Progression Policy will be followed. Please refer to the UNLV DNP Online Program page on WebCampus or the UNLV DNP Coordinator for a copy of the policy.

Students will select a chair for their capstone committee in the first semester and be required to file the Committee Appointment Form with the DNP coordinator when this is completed. This advisory committee must be formed before students can start on the capstone proposal. The graduate school representative is a university-at-large member given the role of representing the graduate school, assuring compliance with graduate school regulations and procedures and reporting any deviation from prescribed standards to the graduate college. All members of the committee must have graduate faculty status or approval of the Dean of the Graduate School. More specific information about the capstone project will be discussed in the courses it is embedded in the program.

Courses and Course load requirement

Students are enrolled in the UNDNP program as a 'cohort'. The program is a 5-semester prescribed program and students are expected to matriculate along with the cohort starting from the 1st semester until completion.

In instances where students are not with their cohort for extenuating circumstances, they will need to continue to take a minimum of 3 credits per semester for both fall and spring semesters to maintain their place in the program until graduation.

Leave of absence may be requested by students. This is done through the Graduate College by filling out the form Application for Leave of Absence. This leave request must be approved the DNP Coordinator/Department chair, advisor, and dean of the school before being forwarded to the Graduate College for final approval. It is the student's responsibility to make sure this form has been signed by all individuals and approved before taking the leave of absence. Please look at the Graduate College website for policies and procedures related to this request and some of the issues students should be aware of before taking leave. http://catalog.unlv.edu/content.php?catoid=3& navoid=119#Leave of Absence

Forms Required for the UNDNP Program at UNLV

Students will have a series of forms required by the graduate college as they progress through the program. The timeline from admission to graduate chart in this handbook outlines each step in the process. Please refer to the graduate college website: http://graduatecollege.unlv.edu/forms/ to download these forms.

The complete list of forms includes:

- Degree Plan Requirements form:
 - Two part form: Part A: outlines student's proposed degree plan. Part B: is optional and is only for students transferring credits in from other programs or universities.
 Transfer credits should be submitted early in the process to ensure confirmation that the credits are transferable and applicable to the student's degree program.
- Proposed degree program forms:
 - o There are two documents: Part I and Part II. Part I is the attached form to be filled out. Part II is the contract or time line sheet (you and your advisor should have this already, which is a listing and sequence of your courses) (please see handbook for further information). These two parts need to be submitted at the same time. Follow the instructions on the form.
- Committee Appointment form:
 - This form needs to be filled out when capstone chair and committee members are appointed. This will be submitted at the end of the 1st

- semester or beginning of the 2nd semester before students start the capstone proposal in the 2nd semester.
- Prospectus Approval form:
 - This form needs to be filled out when the student's capstone prospectus is approved and before students can continue on to work on their capstone project.
- Advancement to Candidacy:
 - o This form needs to be filled out after the student passed the capstone proposal and the capstone prospectus has been approved. This form and the prospectus approval form are filed at the same time with the graduate college for the UNDNP program students at UNLV.
- Final Defense form:
 - This form needs to be filled when oral defense of the capstone is completed.
- Cover sheet for Capstone:
 - This form needs to be filled out when the final project is complete and approved.

Nursing M.S.N.

The M.S.N. program currently offers two tracks: the Family Nurse Practitioner (NP) Track and the Nurse Educator (NE) Track. The role of the nurse practitioner (NP) is that of direct care provider. NPs practice in clinics, long-term care facilities, hospitals, physician offices, managed care corporations and private industries. NPs perform health histories and physical examinations, order and interpret diagnostic tests, diagnose and manage acute and chronic diseases, prescribe medication and treatments, provide patient and family counseling and education regarding lifestyle behaviors and self-care skills and participate in research projects and integrate research findings. The NP blends some aspects of medicine with nursing, using a nursing perspective. When required by state law, as it is in Nevada, NPs have collaborative relationships with physicians. Credentialing examinations, designed by specialty area, are available and required prior to practice in most states. The nurse practitioner track offers courses with the option for full-time and part-time

The nurse educator track prepares the graduate for a faculty position within a program of nursing or a

nurse educator position in a clinical setting. The student will increase mastery related to teaching and learning and evaluation strategies, curriculum design, and the use of educational technologies. Via directed study and mentorship with experienced faculty, students will enhance clinical expertise in a selected specialty area. Graduate students will have the opportunity to supervise basic nursing students in clinical practice areas and/or work with nurse educators in clinical settings in the preparation, delivery and evaluation of educational programs for nurses. The nurse educator track is a year round program featuring full time and part time options for program completion.

Program Outcomes of the Master of Science Degree

Upon completion of the program the graduate will complete the following core outcomes:

- Evaluate the principles, personal values, and beliefs that influence ethical decision making, which provides a framework for nursing practice.
- Communicate effectively as a health care professional, creating collaborative interdependent relationships and act as advocates for the nursing profession and client population.
- 3. Incorporate nursing theory and evidence based practice in advanced nursing roles.
- Understand the influences of human diversity and social issues in providing culturally sensitive health promotion and disease prevention strategies in a global society.
- 5. Assume a leadership role in the management of human, fiscal and physical health care resources to improve nursing practice and health care delivery.

Program Outcomes: Nurse Practitioner Track

- Competently assess, diagnose, prescribe, evaluate and create a holistic plan of treatment.
- Articulate the professional role, which includes the ethical code of conduct and scope of advanced practice.
- 3. Develop and monitor comprehensive, holistic plans of care that address the health promotion and disease prevention needs of diverse client populations.
- 4. Assess and monitor teaching/learning needs in a diverse client population. Practice ethically in the conduct of research,

management and clinical professional practice.

Program Outcomes: Nurse Educator Track

- 1. Utilize education research to continually improve teaching strategies/skills.
- 2. Develop a teaching-learning style that facilitates learner development that meets the educational outcomes of the learner.
- 3. Assess and evaluate at both the course and program level
- 4. Function as a leader and change agent in nursing education settings.
- Participate in scholarship to further knowledge and abilities in nursing education.

Admission Requirements

Students are admitted to the program in the fall semester of each year based upon competitive selection. Students may enroll in selected (NURS 705, 706, and 713) classes as a non-degree student, but no more than seven credits of course work as a non-degree student will be accepted toward the degree.

Students make simultaneous application to the Graduate College and the School of Nursing.

- 1. Cumulative Grade Point Average (GPA) of 3.00 or a GPA of 3.00 in the last two years of undergraduate work. (Submit one copy of official transcripts from all previous college and professional schools to the Graduate College and one copy to the School of Nursing). The undergraduate nursing course work must have been completed at a nursing program accredited by the National League for Nursing Accrediting Commission or Commission on Collegiate Nursing Education.
- Completion of undergraduate courses in nursing research, physical assessment (as currently taught in the undergraduate program of nursing at UNLV), and a course in introductory statistics. All prerequisite courses must be completed with a grade of C (2.00) or better. It is expected that students possess basic computer word processing skills. If not, the student should seek that content prior to enrollment.
- 3. Completion of a graduate level statistics course with a grade of "B" or better within five years prior to matriculation into the MSN program. (Example EPY 721 or KIN 751.)
- 4. Two letters of recommendation from former instructors or employers that speak to the

- applicant's potential to complete the graduate program must be submitted to the school. The evaluators should speak to the student's professional nursing competency, including application of theory, quality of patient care, independent judgment when appropriate; relationship with team members such as nurses, physicians, and others; leadership skills; and personal responsibility and accountability.
- 5. A current résumé or curriculum vita.
- Current valid RN license in state of residence. Students should submit a copy of their Nursing License with the word "copy" printed over the top.
- 7. Accepted applicants must, prior to enrollment, show evidence of current health and malpractice insurance, proof of completion of the Hepatitis B Vaccine series, or a titer indicating presumptive immunity, proof of varicella or a titer indicating presumptive immunity, or a statement from a health care provider indicating that vaccination is contraindicated for health reasons and validation of a negative drug screen and background check. Other immunization and health data requirements are identified in the student handbook.
- 8. A statement of approximately 300 words describing the student's professional goals and reason for seeking graduate education.
- 9. Students seeking admission to the FNP track must submit a resume or vita that demonstrates a minimum of one year clinical experience as a registered nurse.
- Students seeking admission into the Nursing Education Pathway are required to have completed one year of clinical practice prior to enrollment in the first nursing education practicum course (NURS 733).
- 11. Selection into one of the approved pathways is based upon the applicant's qualifications (academic and professional), applicant's strengths as compared to other applicants, and upon the number of available openings.

Progression: To progress in the M.S.N. program students must:

- 1. Maintain a cumulative grade point average of 3.00 or above each semester enrolled.
- 2. Receive a grade of B (3.00) or above in all required cognate and nursing courses. If less than a B, for example a B- (2.70), is earned, the course must be repeated. The student must be in good standing to repeat a course

- and any required course may be repeated only one time.
- 3. A student may register for a course only two times. A student who has registered for the same course twice and has withdrawn or received a grade less than B is ineligible for readmission unless approved by the UNLV Graduate College.
- 4. If a student fails two courses or has withdrawn from two courses or received a grad less than B in two courses he/she is ineligible for readmission unless approved by the Graduate College.
- 5. Complete a minimum of six semester hours in each calendar year.
- 6. Continuously register for a minimum of three (3) semester hours of credit each semester while working on the thesis, capstone, professional paper, or research utilization project.
- In order to maintain clinical competency the FNP student must continuously register for at least three (3) semester hours of NURS 773 (clinical practicum) each semester while working on the thesis or capstone project if all required clinical courses are completed.

Graduation Requirements

- Residency Credits No more than three courses (maximum 7 credits) may be transferred into the program. The MSN Coordinator and the Graduate College must approve transfer credit.
- 2. Credit by Challenge Examination: Graduate courses with a 700 number or above may not be challenged for credit.
- 3. Six-Year Completion Rule All degree requirements must be completed within six calendar years from the date of matriculation. No credit may be used in an advanced degree program for course work completed more than six calendar years immediately preceding the term in which all degree requirements are completed.
- 4. Graduation Requirements: Students have a choice of the catalog under which they wish to graduate. They may choose between: 1) the year of official matriculation, or 2) the year of graduation. Students are encouraged to meet the requirements of the current catalog.
- 5. Comprehensive Examination: Students in all tracks will be formally evaluated by an Examination Committee for their thesis, utilization project, professional paper or

capstone project. (More detailed information is provided in the MSN Handbook.)

Part-Time Study

Students may complete the Nursing Education track on a part-time basis. Nurse Practitioner students may complete courses prior to the clinical sequence of the NP tracks on a part-time basis, but must be cognizant of the six-year completion rule. Students entering the clinical sequence of the NP tracks must enroll as full-time students. Due to the heavy clinical commitment in the NP tracks, it is recommended that students work no more than two shifts per week.

Course Requirements for Students in the Family Nurse Practitioner Track - Total Credits: 48

- NURS 703 Advanced Physical Assessment
- NURS 704 Pathophysiology for Advanced Nursing Practice
- NURS 705 Roles in Advanced Practice Nursing
- NURS 706 Nursing Theory and the Research Process
- NURS 707 Nursing Research Methods and Utilization
- NURS 713 Health and Public Policy
- NURS 714 Family Theory and Assessment in Primary Care:
- NURS 730 Pharmacology in Primary Care
- NURS 749 Primary Care of the Family I
- NURS 759 Primary Care of the Family II
- NURS 769 Primary Care of the Family III
- NURS 752 Role of the Nurse Practitioner

SCHOLARLY REQUIREMENT

- NURS 766 Capstone Seminar I
- NURS 796 Capstone Seminar II
- NURS 799 Thesis

Course Requirements for Students in the Nursing Education Track - Total Credits: 39

- NURS 706 Nursing Theory and the Research Process
- NURS 709 Teaching and Learning in Nursing
- NURS 710 Evaluation Strategies For Nurse Educators
- NURS 755 Nursing Educator Role Development
- NURS 707 Nursing Research Methods and Utilization
- NURS 724 Developing Curriculum for Nursing Education
- NURS 742 Advanced Nursing Informatics
- NURS 723 Specialty Focus for Nurse Educators

- NURS 733 Nursing Practicum I
- NURS 713 Health and Public Policy
- NURS 743 Nursing Education Practicum 2

SCHOLARLY REQUIREMENT

- NURS 799 Thesis OR
- NURS 795 Research Utilization Project OR
- NURS 793 Nursing Education Professional Paper
 There are distant on a record and decidents.

Three credits of an approved graduate elective taken by students selecting the professional paper option.

Nursing Ph.D.

Individuals who complete the PhD in Nursing Program will be prepared for roles as leader, scholar/researcher, and educator in academia, the health care industry, or government and private organizations focused on health care. Graduates will demonstrate the following program outcomes:

- Provide leadership in the advancement of nursing as a scientific and practice discipline through the conduct of culturally competent scholarship and identification of implications for policy, the discipline, and the profession.
- Conduct and communicate original research that generates new knowledge.
- Develop, implement and evaluate innovative approaches to teaching and learning.

Program Entrance Requirements

Admission into the nursing doctoral program is contingent upon the qualifications of the applicant and the availability of positions. Students are admitted once a year in the fall. Applicants must have submitted all required materials by **February 1**.

Admission Requirements

- For the Post-DNP to PhD option an earned Doctorate in Nursing Practice degree from a program accredited by the National League for Nursing Accrediting Commission or the Commission on Collegiate Nursing Education is required.
- Earned master's degrees in nursing (MSN)
 from programs accredited by the National
 League for Nursing Accrediting
 Commission or the Commission on
 Collegiate Nursing Education; persons
 educated outside the United States need to
 demonstrate proof of equivalent education
 and advanced degrees.

- 3. Persons holding a bachelor's degree in nursing and master's degree in a healthrelated discipline from an accredited institution are eligible for admission but will need to successfully complete NURS 705 or NURS 755, 706, 707, and 713 from the MSN program prior to taking doctoral courses.
- 4. A minimal grade point average of 3.5 (4.0 =A) earned in a nursing or health-related master's program of study.
- 5. Successful completion of **graduate** course work in statistics and research.
- 6. Licensed as a Registered Nurse in at least one state or territory of the US.
- 7. Applicants must present competitive GRE scores on verbal, quantitative and analytic measures. The exam must have been taken within the last five years.
- 8. Three letters of recommendation are required from individuals who can evaluate the applicant's motivation, academic capability, scholarship potential, and personal integrity for doctoral study in
- 9. Evidence of current health and malpractice insurance. Accepted applicants must, prior to enrollment, show proof of completion of the Hepatitis B vaccine series, a titer indicating presumptive immunity, or a statement from a health care provider indicating that vaccination is contraindicated for health reasons and validation of a negative drug screen. Other immunization and health data requirements are identified in the student handbook.
- 10. Applicants must submit the following written materials for review: a. Two representative samples of scholarly work (e.g., thesis, demonstration project, publications, etc.). b. Written statement of personal career, educational and scholarship goals including identification of research interests. The applicant's research interests must be within the realm of our faculty expertise in order to pursue a doctoral degree in this program. c. Curriculum Vita or resume.
- 11. Applicants are required to participate in an interview with members of the Admissions Committee, either in person or by telephone.

Course Offerings

Doctoral courses offered by the School of Nursing are **web-based**. However, students are required to be on campus three days at the beginning of each fall

semester. These meeting times and dates are set in advance to allow students adequate time to plan their schedules and most likely occur on Friday and/or Saturday.

Programs of Study

There are three options in the current PhD in Nursing Program: "Nursing Education" Option, "Urban Sustainability: Health" Option and the "Post-DNP to PhD" option. The UNLV SON PhD in Nursing Curriculum Framework outlines the shared required core courses in the PhD Nursing Program.

Students enrolled in the "Nursing Education" Option who have completed appropriate nursing education courses prior to admission will complete a reduced number of credits for a total of no less than 53 graduate credit hours. Students can enroll for either part-time or full-time study.

Students enrolled in the "Post-DNP to PhD" Option, who have completed a DNP degree obtained from an accredited program prior to admission, will complete a reduced number of credits for a total of no less than 45 graduate credit hours. Students can enroll for either part-time or full-time study.

Degree Requirements

All students will complete the following program of study in terms of major focal areas of the curriculum. **Doctoral Core - Total Credits: 44**

- NURS 709 Teaching and Learning in Nursing
- NURS 770 Knowledge Development in
- NURS 771 Theory Development in Nursing
- NURS 772 The Nurse as Leader
- NURS 775 Statistical Methods for Nursing Research I: Univariate Methods
- NURS 776 Statistical Methods for Nursing Research II: Multivariate Methods
- NURS 779 Writing a Research Grant Application
- NURS 780 Research Methods in Nursing
- NURS 781 Qualitative Data Analysis **Processes**
- NURS 785 Special Topics in Nursing Research
- NURS 789 Independent Study
- NURS 797 Dissertation

Nursing Education Option - Total Credits: 19

- NURS 710 Evaluation Strategies For Nurse Educators
- NURS 724 Developing Curriculum for Nursing Education
- NURS 733 Nursing Practicum I
- NURS 774 Educational Theory and Philosophy for Nursing
- NURS 790 Independent Teaching Practicum Seminar
- NURS 791 Independent Teaching Practicum

Urban Sustainability: Health Option- Total Credits: 19

- NURS 778 Geographic Information Systems for Health
- NURS 782 Sustainability of Urban Health: Clinical Perspectives
- NURS 783 Economics of Sustaining Urban Health
- NURS 784 Health and Public Policy for Urban Sustainability
- NURS 777 Individualized Study/Dissertation Seminar

Post DNP to PhD Option:

• 45 units from the core PhD nursing courses plus 17 units from an accredited DNP program.

Credit Hours and Grade Point Average

A minimum of 62 graduate credit hours is required (students who have completed courses 709, 710, 724, and 733 or equivalent course work in either their masters' or postmasters' education are required to complete a minimum of 53 credits of required course work). A grade point average of 3.0 must be maintained in all courses required for the degree; no grade less than B is acceptable for curricular completion of the program. Each student, upon admission, will be assigned an initial academic advisor who will plan the student's entire program of study for submission to the Ph.D. Coordinator for approval. Approved courses will include those taught in other disciplines and must relate to the student's area of research.

Progression and Policies

Initial advisors monitor the student's progress through the program of study. In addition, the Ph.D. Coordinator will monitor the student's progress, including adherence to all established policies of the Graduate College. After the student has selected a research topic, the student will select an advisor based on research focus and needs. Upon student

recommendation, faculty acceptance, and approval from both the Ph.D. Coordinator and the Graduate College, the advisor will be changed.

Comprehensive Examination

Upon completion of all required course work other than dissertation and research seminar, each student must take a written Comprehensive Examination that will assess a doctoral student's readiness to begin the doctoral dissertation. Specifically, the examination will evaluate a student's written and oral articulation of a possible dissertation research focus or problem. Upon completion of these requirements, the student achieves candidacy and can register for dissertation credits and begin dissertation proposal development followed by independent dissertation study.

Dissertation Proposal and Prospectus

Upon successfully completing the comprehensive examination and proposal defense, the student submits a dissertation prospectus to his/her committee for approval. After approval, the student submits a "Prospectus Approval Form" to the Graduate College. The student's major advisor and dissertation committee are responsible for the student's progression through the dissertation.

Final Oral Examination

Upon completion of the dissertation, the student must pass a final oral examination which involves the successful defense of the dissertation study. All dissertation committee members must be present for this examination and may question the student following presentation of the study. The defense will be scheduled and conducted in accordance with the Graduate College's policies for dissertation completion.

Pediatric Nurse Practitioner Certificate

The role of the Nurse Practitioner is that of direct care provider. Nurse practitioners may be educated in a variety of specialties, but the programs offered at UNLV are those of Family Nurse Practitioner and the Pediatric Nurse Practitioner. Currently the Geriatric Nurse Practitioner pathway is not offered. However, a post-master's certificate will potentially be offered in fall, 2006 if there are a sufficient number of qualified applicants.

NP's practice in clinics, long term care facilities, hospitals, physician offices, managed care corporations, and private industries. Practitioners perform health histories and physical examinations, order and interpret diagnostic tests, diagnose and manage acute and chronic diseases, prescribe

medication and treatments, provide patient and family counseling and education regarding lifestyle behaviors and self-care skills, and participate in research projects as well as integrate research findings into practice.

The NP blends some aspects of medicine with Nursing, using a Nursing perspective. When required by state law, as it is in Nevada, NP's have collaborative relationships with physicians. Credentialing examinations, designed by specialty areas, are available and required prior to practice in most states.

A. Core courses completed by ALL practitioner students

NURS 704 - Pathophysiology for Advanced Nursing Practice

NURS 705 - Roles in Advanced Practice Nursing

NURS 706 - Nursing Theory and the Research

NURS 707 - Nursing Research Methods and Utilization

NURS 713 - Health and Public Policy

NURS 730 - Pharmacology in Primary Care

NURS 752 - Role of the Nurse Practitioner

NURS 766 - Capstone Seminar I

NURS 796 - Capstone Seminar II

B. Clinical Pathway

NURS 714 - Family Theory and Assessment in Primary Care:

NURS 731 - Advanced Pediatric Health Assessment

NURS 734 - Primary Care in Pediatrics: The Well Child and Adolescent

NURS 744 - Primary Care in Pediatrics: Common Problems

NURS 764 - Primary Care in Pediatrics: Chronic Conditions

Post-Masters Family Nurse Practitioner Certificate

Individuals who already have a master's degree in nursing, and meet the admission qualifications will be allowed to take courses as a non-degree student. No degree will be awarded, but a certificate documenting completion of the course work will be provided and transcripts showing completion of the courses will be available. Each individual applicant will be evaluated to determine the courses required in order to complete the specific certificate program. Additional courses beyond the minimum courses needed for the certificate program may be required if

the applicant's earned MS in nursing lack courses required by the UNLV School of Nursing.

Certificate Requirements: 36 Credits

NURS 703 - Advanced Physical Assessment

NURS 704 - Pathophysiology for Advanced Nursing Practice

NURS 714 - Family Theory and Assessment in Primary Care:

NURS 730 - Pharmacology in Primary Care

NURS 749 - Primary Care of the Family I

NURS 752 - Role of the Nurse Practitioner

NURS 759 - Primary Care of the Family II

NURS 769 - Primary Care of the Family III

Post-Masters Nursing Education Certificate

Individuals who already hold a master's degree in nursing and meet the admission qualifications, may take courses leading to the Nursing Education Post-Masters Certificate. Admitted students take courses as a non-degree student and are awarded a certificate documenting completion of the required course work. The Nursing Education Post-Masters Certificate prepares individuals for teaching positions within a program of nursing or a nurse educator position in a clinical setting. Additional courses beyond the minimum courses needed for the certificate program may be required if the applicants earned M.S. in Nursing lack courses required by the UNLV School of Nursing.

Certificate Requirements: 12 Credits

NURS 709 - Teaching and Learning in Nursing

NURS 710 - Evaluation Strategies For Nurse Educators

NURS 724 - Developing Curriculum for Nursing Education

NURS 733 - Nursing Practicum I

Course Descriptions

NURS 622 - AIDS: An Interdisciplinary Perspective

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

NURS 654 - Introduction to Forensic Nursing

This course has been approved for graduate credit. A full description of this course may be found in the

Undergraduate Catalog under the corresponding 400 number.

NURS 675 - Nursing Systems Management

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

NURS 676 - Introduction to Nursing Case Management

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

NURS 677 - Nursing Case Management Systems

This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

NURS 703 - Advanced Physical Assessment Credits 3

Focuses on expanding the skills necessary to do a comprehensive physical assessment. Emphasis on developing advanced techniques in history taking and physical examination to prepare the student for clinical course as a nurse practitioner. Correlation of assessment findings with pathophysiological processes to develop differential diagnosis is presented. **Prerequisites:** Admission to Graduate Program or consent of instructor.

NURS 704 - Pathophysiology for Advanced Nursing Practice

Credits 3

Emphasis on physiologic mechanisms of disease from a cellular perspective. Cellular pathophysiology of disease as it translates into clinical signs and symptoms manifested by the patient. Physiology of growth and development and the physiology of aging as they contrast with pathophysiologic mechanisms of disease. **Prerequisites**: Admission into the graduate program in nursing or consent of instructor.

NURS 705 - Roles in Advanced Practice Nursing Credits 1

Introduces specialty areas within advanced practice nursing. Differentiates between characteristics of each specialty area. **Prerequisites**: Consent of Graduate Program Advisor.

NURS 706 - Nursing Theory and the Research Process

Credits 3

Examines nursing theories/models and their role in practice, research and education. Emphasizes the structure, building and testing of nursing knowledge. Discussion of the research process. **Prerequisites:** Graduate standing.

NURS 707 - Nursing Research Methods and Utilization

Credits 3

Examines qualitative and quantitative nursing research methods, research utilization and skills for critical evaluation of nursing research. Evaluation of research findings for evidence-based practice or thesis approach to scholarly inquiry also emphasized. **Prerequisites**: NURS 706

NURS 709 - Teaching and Learning in Nursing Credits 3

Explores traditional and alternative teaching and learning concepts, skills, and strategies. Emphasis is on competencies of an educator. **Prerequisites:** Admission to the Graduate Nursing Program or Certificate Program for Nurse Educators.

NURS 710 - Evaluation Strategies For Nurse Educators

Credits 3

Develops formative/process and summative/outcome evaluations for patients, students, peers and programs using both traditional and alternative evaluation strategies. Experience in evaluating outcomes and processes of education within the context of nursing specialty area. **Prerequisites**: Admission to the Graduate Nursing Program or Certificate Program for Nurse Educators.

NURS 713 - Health and Public Policy

Credits 3

Examines selected health problems from a political, cultural, social, educational, environmental, economic and ethical perspective. Analysis of research and public policy relevant to the prevention, treatment and amelioration of the problems. Initiate change strategies to impact public policy related to the selected problems. **Prerequisites:** Consent of Graduate Program Advisor.

NURS 714 - Family Theory and Assessment in Primary Care

Credits 3

Study of advanced and emerging theory in family nursing science, determinants of family health, and research in family systems in the context of society and culture. Emphasis on family as client. Applies theory to phenomena in family and child health.

NURS 719R - Health & Public Policy for Advanced Practice of Nursing

Credits 3

Prepares nursing leaders to analyze and influence health policy. Defines problems, critiques potential solutions, assesses political influences, designs interventions for policy-making, and evaluates outcomes. **Prerequisites:**

Completion of the first 2 terms in the DNP program or permission of instructor.

NURS 720 - Functionality of the GNP Role Credits 3

Focuses on roles of GNP as expert practitioner, educator, consultant, clinical researcher and systems manager in primary, secondary and tertiary practice settings. Uses bio-psycho-social, spiritual, cultural perspectives and epidemiology data to examine communication, developmental and intergenerational issues in the care of older adults. **Notes:** (3 hours/week practicum). **Prerequisites:** NURS 705 and acceptance into the Gerontological Nurse Practitioner pathway.

NURS 722 - Integrative Health Care

Credits 3

Exploration of healing and wholeness as a philosophy for advanced nursing practice. Examination and evaluation of healing modalities that can be utilized for health promotion and treatment of common health problems. **Prerequisites:** NURS 705, NURS 706

NURS 723 - Specialty Focus for Nurse Educators Credits 4

Advanced knowledge in nursing specialty area of choice. Under the direction of a nursing faculty mentor, examines interrelationships between theory, practice, and research within specialty area. Includes independent study lab and seminar. **Prerequisites:** Admission to the Graduate Nursing Program or Certificate Program for Nursing Educators.

NURS 724 - Developing Curriculum for Nursing Education

Credits 3

Develop curriculum for educational programs in schools of nursing and clinical agencies. Clinical specialty area and intended practice setting serve as context for course assignments. **Prerequisites:** Admission to the Graduate Nursing Program or Certificate Program for Nursing Educators.

NURS 725 - Scientific Underpinnings of the DNP in Advanced Practice Nursing

Credits 2

Articulates and supports a role for the nursing doctorate to prepare nurse leaders within the discipline of nursing.

Prerequisites: Admission to the DNP Program.

NURS 727 - Nursing Management: Organizational Level

Credits 3

Analysis of theories and goals of nursing management, the processes and resources utilized for goal achievement and the various systems which impact nursing care delivery. **Prerequisites:** NURS 706, NURS 707, and NURS 713

NURS 728R - Analysis of Health Organizations Credits 2

An introduction to the analysis of the health/human service organization as a particular type of complex organization. **Prerequisites:** Admission to the DNP Program or permission of instructor.

NURS 729R - Translational Evidence for Healthcare Systems

Credits 3

Critical analysis and synthesis of the literature and available data to determine and implement evidence-based science into healthcare practice. **Prerequisites:** Admission to the DNP Program.

NURS 730 - Pharmacology in Primary Care Credits 3

Focuses on the clinical application of pharmacologic and pharmacy kinetics principles in the management of selected health problems of adults and children. Focuses on drugs commonly used for adults and children in primary care settings. **Prerequisites:** NURS 704

NURS 731 - Advanced Pediatric Health Assessment

Credits 3

Focuses on advanced concepts in the physical, social, cognitive and developmental assessment of infants, children, and adolescents. Physical assessment specific to each age group will be studied. Students will also explore several selected developmental screening tools. **Notes:** Three hours/week of precepted clinical/lab. **Prerequisites:** Graduate standing in PNP track.

NURS 732 - Economics of Healthcare Delivery Credits 3

Addresses basic concepts and techniques for financial management as it relates to clinical practice, clinical teaching, and research in healthcare programs and organizations. **Prerequisites:** Completion of the first

term courses in the DNP program or permission of the instructor.

NURS 733 - Nursing Practicum I

Credits 3

Applies strategies and concepts of the nurse educator role in a practice setting of choice and within the context of clinical specialty area. **Prerequisites:** NURS 709, NURS 710, and NURS 723.

NURS 734 - Primary Care in Pediatrics: The Well Child and Adolescent

Credits 6

Primary care of children and adolescents, specifically, advanced nursing assessment and interventions designed to promote the wellness of children aged O through adolescents are emphasized. Includes screening anticipatory guidance and health promotion strategies. **Notes:** Twelve hours of precepted practium per week. **Prerequisites:** NURS 704 and NURS 731.

NURS 740 - The GNP Role in Wellness Management: Primary Prevention

Credits 6

Theoretical and clinical basis of primary prevention for older adults. Focuses on concepts of health promotion, maintenance, screening, teaching, advocacy and financing. Exploration of essential nutrition needs, lifestyle and living patterns of non-institutionalized older adults. Clinical management includes algorithm, protocols and health maintenance flow sheets. **Notes:** (12 hours/week practicum). **Prerequisites:** NURS 703, NURS 704, NURS 720, and NURS 730.

NURS 742 - Advanced Nursing Informatics Credits 2

Analyze the use of computer and information science and systems to manage and process data, information and knowledge in nursing education. **Notes:** Nursing specialty serves as the context for course assignments.

Prerequisites: Admission to the Graduate Nursing Program or Certificate Program for Nurse Educators.

NURS 743 - Nursing Education Practicum 2 Credits 4

Second practicum to apply and evaluate strategies and concepts of the nurse educator role in a practice setting of choice and within the context of clinical specialty area. **Prerequisites:** NURS 709, NURS 710, NURS 723 and NURS 733.

NURS 744 - Primary Care in Pediatrics: Common Problems

Credits 7

Research-based assessment, diagnosis, management and evaluation of common acute health problems affecting children from infancy through adolescence. **Notes:** Nine hours per week of precepted practicum. **Prerequisites:** NURS 731 and NURS 734.

NURS 745 - Healthcare Information Systems & Technology

Credits 3

Leadership models for nurse educator, advanced practice, or management roles. Mentorship, service, knowledge dissemination and impact of diversity on ethical leadership practices are included.

Prerequisites: Completion of the second term of the DNP Program or permission of the instructor.

NURS 749 - Primary Care of the Family I Credits 7

Theoretical and clinical bases of primary and secondary prevention for families across the lifespan. Focuses is on health maintenance, teaching, screening, and clinical management of common acute health problems. Emphasis on wellness management, differential diagnoses, and pharmacologic/non-pharmacologic treatment options. **Notes:** (15 hours/week clinical). **Prerequisites:** NURS 703, Basic Life Support Certification and current malpractice insurance.

NURS 750 - The GNP Role in Acute Illness Management: Secondary Prevention Credits 6

Theoretical and clinical basis of secondary prevention (acute care) for older adults. Focuses on clinical management of common acute health problems encountered in an inpatient or outpatient setting, stressing differential diagnosis and pharmacologic/non-pharmacologic treatment options. **Prerequisites:** NURS 740

NURS 752 - Role of the Nurse Practitioner

Assists the student in transitioning into the role of the practicing nurse practitioner. Focuses on ethical decision making, legal issues, various practice plans, billing, credentialing and legal certification requirements for practice.

Prerequisites: Concurrent enrollment in NURS 769.

NURS 755 - Nursing Educator Role Development Credits 2

Explores the role of the nurse educator including development in the areas of teaching, research, and

service. Examines interpersonal dynamics and teamwork in academic and practice settings, functioning within institutional expectations, developing a teaching portfolio, legal issues, and future directions in nursing education.

NURS 757 - Field Study in Nursing Management Credits 3

Application and testing of existing theories and processes of management in the delivery of nursing services. Projects carried out under the guidance of a nursing faculty member, in collaboration with a preceptor in a clinical agency. Prerequisites: NURS

NURS 759 - Primary Care of the Family II Credits 8

Theoretical and clinical basis for secondary and tertiary prevention interventions across the lifespan. Focuses on clinical management of common acute health problems. Students examine the individual, familial and societal impact of chronic and terminal illness. Emphasis on differential diagnosis, clinical management and identification/utilization of community resources. Notes: (15 hours of clinical per week). Prerequisites: Successful completion of NURS 749/ NURS 749L

NURS 760 - The GNP Role in Chronic Illness Management: Primary, Secondary and Tertiary Prevention

Credits 8

Focuses on chronic illness management of the older adult in primary, secondary and/or tertiary settings. Seminar presentations include research and practice protocols. Practicum involves increased independence under supervision of on-site preceptors and clinical instructor. Notes: (15 hours/week practicum). Prerequisites: Successful completion of NURS 750.

NURS 762 - Integrative Health Care Practicum I Credits 3

Development of skill in mind-body therapies. Exploration and evaluation of providers of complementary therapies in the community that enables the student to develop a knowledge base regarding appropriate therapies for common health problems. Prerequisites: NURS 722

NURS 763 - Management Strategies for Nursing & Healthcare Systems

Credits 3

Analysis and application of human resource management, public relations, and marketing strategies for effective and efficient use of human

talent to accomplish organizational goals. **Prerequisites:** Completion of term 3 of DNP Program.

NURS 764 - Primary Care in Pediatrics: Chronic Conditions

Credits 8

Research based assessment, diagnosis, management and evaluation of common developmental and behavioral problems affecting children and families. **Notes:** Nine hours of precepted clinical experience in primary care per week. Prerequisites: NURS 714, **NURS 744**

NURS 765 - DNP Residency

Credits 4

Residency to apply program concepts and develop and implement strategies for practice-level and/or system-wide practice initiatives to improve the quality of care. Prerequisites: Completion of term 4 course work for DNP Program.

NURS 766 - Capstone Seminar I

Credits 1

Capstone seminar provides students with the opportunity to synthesize core and major coursework completed during the program of graduate study. Capstone seminar I, the first of two capstone credits. culminates in the submission of the first written draft of the capstone project. The capstone is fully developed in capstone II. Prerequisites: NURS 706 and NURS 707.

NURS 767 - Collaboration, Communication & **Negotiation for the Nurse Leader**

Credits 2

The utilization of collaboration, communication and negotiation for implementation of practice models, peer review, practice guidelines, health policy, standards of care, and other scholarly products. **Prerequisites:** NURS 786 DNP Project: Planning for Change.

NURS 768 - DNP Forum & Role Transformation

Examination of issues and challenges in the DNP role and skills and strategies to conceptualize, articulate, plan, and actualize a career as a nurse leader. **Prerequisites:** Completion of term 4 course work for DNP Program.

NURS 769 - Primary Care of the Family III Credits 8

This final clinical seminar focuses on continued clinical expertise and relies on the knowledge and skills learned in previous courses. Students gain skill in providing care to families with increasing independence under the supervision of a preceptor and clinical instructor. (1 credit of seminar = 2 contact hours, 7 credits of clinical = 21 contact hours of clinical per week. **Prerequisites:** Successful completion of NURS 749/NURS 749L and NURS 759/NURS 759L.

NURS 770 - Knowledge Development in Nursing Credits 3

Offers a disciplinary context for doctoral study in nursing. The history and evolution of nursing knowledge is examined. Emphasis is on debates regarding what is known and how it is known. **Prerequisites:** Enrollment in nursing doctoral program.

NURS 771 - Theory Development in Nursing Credits 3

Theoretical frameworks that guide the development of nursing knowledge. The methods and processes of theory development are analyzed. **Prerequisites:** Enrollment in doctoral program.

NURS 772 - The Nurse as Leader

Credits 3

Leadership models as templates for nurse leader. Factors that influence leadership will be explored. **Prerequisites:** Enrollment in the nursing doctoral program.

NURS 773 - Clinical Practicum

Credits 3 - 6

Designed for students continuing a clinical practicum while completing NURS 795/799/796. Students enrolled in this clinical practicum course must register for at least 3 credits (this translates to at least nine hours of clinical per week) but no more than six credits in any one semester. **Notes:** May be repeated up to three consecutive semesters but a student may not take more than a total of nine credits.

Prerequisites: Successful completion of NURS 769/NURS 769L.

NURS 774 - Educational Theory and Philosophy for Nursing

Credits 3

Explores traditional and contemporary philosophies and theories of education within the context of societal development. Examines the role of educational theory and philosophy within nursing education. **Prerequisites:** Enrollment in the nursing doctoral program.

NURS 775 - Statistical Methods for Nursing Research I: Univariate Methods

Credits 3

Designed to provide students with skills necessary to understand, interpret, and conduct descriptive and univariate analysis relevant to the field of nursing. Students will gain practical experience examining real-world data sets using SPSS software.

Prerequisites: Enrollment in the nursing doctoral program; successful completion of introductory graduate level statistics course.

NURS 776 - Statistical Methods for Nursing Research II: Multivariate Methods

Credits 3

Focuses on multivariate methods useful for the field of nursing research. Students will be expected to complete a capstone project to explore and implement statistical methods likely to be part of their dissertation projects. **Prerequisites:** NURS 775 or equivalent; enrollment in the nursing doctoral program.

NURS 777 - Individualized Study/Dissertation Seminar

Credits 1 - 8

Individualized study or seminar to facilitate dissertation research. **Notes:** May be repeated to a maximum of eight credits. **Prerequisites:** Admission into doctoral program or permission of instructor.

NURS 778 - Geographic Information Systems for Health

Credits 3

Introduces the use of epidemiologic methods and modern geographic information systems to analyze the relationships between socioeconomic, physical, geopolitical, and demographic factors and urban health. These techniques for the basis of assessment of urban health problems to inform, plan, deliver, and evaluate appropriate interventions to ensure urban sustainability. **Prerequisites:** Admission into doctoral program or permission of instructor.

NURS 779 - Writing a Research Grant Application

Credits 2

Involves preparing and writing a research grant application. Students will learn how to prepare a research budget and budget justification; write a resources and environment section, a biosketch, and project timeline; and propose an innovative and significant research proposal. **Prerequisites:** NURS 780 or permission of instructor.

NURS 780 - Research Methods in Nursing Credits 3

Examines qualitative, quantitative and mixed-method approaches used in nursing research. **Prerequisites:** Admitted to nursing doctoral program.

NURS 781 - Qualitative Data Analysis ProcessesCredits 3

Study of range of approaches to management of qualitative data; exploration of criteria for validity and reliability of outcomes. **Prerequisites:** NURS 780, Enrollment in the Nursing Ph.D. Program.

NURS 782 - Sustainability of Urban Health: Clinical Perspectives

Credits 4

Focuses on air quality, potable water, waste disposal, disasters, and other potentially health-threatening urban environmental problems that affect urban sustainability in developing and developed countries. The impact of sustainability environmental practices on urban health will be examined. **Prerequisites:** NURS 778, admission into doctoral program or permission of instructor.

NURS 783 - Economics of Sustaining Urban Health

Credits 3

Uses an economic sustainability approach to examine health effects of such issues as health insurance and health care financing, acute and chronic disease, and psychosocial issues. The economics of urban health in developing and developed countries will be compared. **Prerequisites:** Admission into doctoral program or permission of instructor.

NURS 784 - Health and Public Policy for Urban Sustainability

Credits 3

Examines urban health promotion in terms of primary, secondary, and tertiary prevention, with an emphasis on the policy issues and critical processes that shape them. Apply theories to identify urban health promotion issues that are linked to sustainability and identify policy strategies for upstream interventions. **Prerequisites:** Admission into doctoral program or permission of instructor.

NURS 785 - Special Topics in Nursing Research Credits 2-8

Provides the student with an opportunity for an indepth exploration of specific aspects of nursing research issues and approaches. **Prerequisites:** NURS 780 and admission to doctoral program.

NURS 786 - DNP Project: Planning Credits 2

Planning, managing, evaluating, and sustaining change in the healthcare environment. Establishes communication with the faculty advisor to develop DNP project. **Prerequisites:** Completion of the first term of DNP coursework or permission of the instructor.

NURS 787 - DNP Project: Implementing

Credits 2

Topics that support students' implementation and evaluation of their DNP projects. **Prerequisites:** Completion of NURS 786 (Project Proposal Plan).

NURS 788 - DNP Project: Defense

Credits 2

Presentation and discussion of completed DNP projects on campus. **Prerequisites:** Completion of NURS 787.

NURS 789 - Independent Study

Credits 3

Supervised student designed study project done in consultation with instructor; must be submitted in writing to student advisor and graduate program coordinator for approval. **Prerequisites:** NURS 770, NURS 771, NURS 772, NURS 780, enrollment in nursing doctoral program.

NURS 790 - Independent Teaching Practicum Seminar

Credits 1

Exploration in group settings of actual experiences and outcomes of independent teaching practicum. Options for enhanced personal performance as nurse educator will be discussed. **Notes:** Must be taken concurrently with NURS 791. **Prerequisites:** NURS 724, NURS 733 and enrollment in nursing doctoral program.

NURS 791 - Independent Teaching Practicum Credits 8

Integrate knowledge and competencies of nurse educator through application in independently taught undergraduate nursing course; systematic exploration of roles, responsibilities, and opportunities inherent in practice of nursing education. **Prerequisites:** NURS 724, NURS 733 and enrollment in nursing doctoral program.

NURS 792 - Outcomes Management & Performance Improvement in Nursing

Credits 3

Application of concepts of quality improvement and safety to the management of outcomes in healthcare and nursing systems to ensure delivery of quality interprofessional care. **Prerequisites:** Completion of Term 3 of DNP program.

NURS 793 - Nursing Education Professional Paper

Credits 3

Focuses on a key area of nursing education requiring exploration and development. Students will select a committee to provide review and guidance. The final paper will be adapted and submitted for publication to a professional, peer-reviewed journal.

Prerequisites: NURS 706, NURS 707, and NURS 733.

NURS 795 - Research Utilization Project

Credits 3

Identify a clinically based problem in area of nursing practice. Evaluate extent current practice deviates from research based practice. Design, implement and systematically evaluate a research-based innovation project.

Notes: May be repeated, but only six credits may be applied to the student's program. **Grading:** S/F grading only.

Prerequisites: NURS 706, NURS 707

NURS 796 - Capstone Seminar II

Credits 1

Capstone seminar II provides students with the opportunity to complete the development of the graduate program capstone project initiated in seminar I. The final written project will be submitted for grading, and the project will be presented orally to the student's advising committee and any interested parties. **Prerequisites:** NURS 766

NURS 797 - Dissertation

Credits 1 - 12

Research analysis and writing toward completion of dissertation and subsequent defense. **Grading:** S/F grading only. **Prerequisites:** Enrollment in nursing doctoral program and consent of instructor.

NURS 798 - Independent Study

Credits 1 - 3

Graduate seminar focusing on current developments in nursing practice. **Notes:** Topics vary each semester. **Prerequisites:** Admission to graduate program and consent of instructor.

NURS 799 - Thesis

Credits 3

Notes: May be repeated, but only six credits may be applied to the student's program. **Grading:** S/F grading only. **Prerequisites:** NURS 706, NURS 707