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RMUoHP is a Candidate for Accreditation through the Northwest Commission on Colleges and Universities (NWCCU, www.nwccu.org). “Regional accreditation of postsecondary institutions is a voluntary, non-governmental, self-regulatory process of quality assurance and institutional improvement” (NWCCU). “Candidate is not accreditation, nor does it ensure eventual accreditation. Candidate for Accreditation is a status of affiliation with the Commission, which indicates that the institution has achieved initial recognition and is progressing toward accreditation” (NWCCU).

RMUoHP has been granted Candidate for Accreditation status by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association (1111 North Fairfax Street, Alexandria, VA, 22314; phone: 703-706- 3245; email: accreditation@apta.org). Candidacy is not an accreditation status nor does it assure eventual accreditation. Candidate for Accreditation is a pre-accreditation status of affiliation with the Commission on Accreditation in Physical Therapy Education that indicates the program is progressing toward accreditation.

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### Core Courses

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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CC 610</td>
<td>Biostatistics 1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>The purpose of this course is to introduce the student to biostatistics, the science of evaluating information in a biological setting. We will cover such topics as simple descriptive statistics, basic probability concepts, probability distributions (normal &amp; binomial), sampling distributions, and an introduction to t-distributions.</td>
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<tr>
<td>CC 610.2</td>
<td>Biostatistics 1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>The purpose of this course is to introduce the student to biostatistics, the science of evaluating information in a biological setting. We will cover such topics as simple descriptive statistics, basic probability concepts, probability distributions (normal &amp; binomial), sampling distributions, and an introduction to t-distributions.</td>
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<tr>
<td>CC 611</td>
<td>Biostatistics 2</td>
<td>1</td>
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<tr>
<td></td>
<td>The purpose of this course is to build upon the topics introduced in Biostatistics 1. This course will cover such topics as interval estimation, confidence intervals, hypothesis tests, and one and two-sample t-tests.</td>
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<tr>
<td>CC 612</td>
<td>Biostatistics 3</td>
<td>1</td>
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<tr>
<td></td>
<td>The purpose of this course is to build upon the topics introduced in Biostatistics 2. This course will cover such topics as correlation, simple linear regression, one-way analysis of variance, factorial designs, post-hoc tests of means and other non-parametric methods.</td>
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<tr>
<td>CC 626</td>
<td>Directed Independent Study</td>
<td>3</td>
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<tr>
<td></td>
<td>This directed independent study course will provide in-depth exploration and practice regarding the mechanics of designing, constructing, writing and preparing a case report for publication. The course’s emphasis will be on designing a case report with an appropriate purpose statement and theoretical construct.</td>
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<tr>
<td>CC 630</td>
<td>Research Methods 1</td>
<td>1</td>
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<tr>
<td></td>
<td>This course will present an introduction to general research principles and research ethics. The student will be introduced to the following topics in the research process: question formulation, principles of measurement, basic design, and methodological features, issues of reliability and validity, and fundamentals of conducting a literature review. A quantitative article critique will be conducted in class and outside of class. This course will provide the student with the necessary background to formulate a hypothesis-driven research short prospectus that can be used to build the foundation of a full research proposal developed in Research Methods 2. The class format will include lecture, small group discussion, and practice.</td>
<td></td>
</tr>
<tr>
<td>CC 630.2</td>
<td>Research Methods 1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>This course will present an introduction to general research principles and research ethics. The student will be introduced to the following topics in the research process: question formulation, principles of measurement, basic design, and methodological features, issues of reliability and validity, and fundamentals of conducting a literature review. A quantitative article critique will be conducted in class and outside of class. This course will provide the student with the necessary background to formulate a hypothesis-driven research short prospectus that can be used to build the foundation of a full</td>
<td></td>
</tr>
</tbody>
</table>
research proposal developed in Research Methods 2. The class format will include lecture, small group discussion, and practice.

**CC 633 Evidence-based Practice**
1 credit
This course is designed to prepare healthcare professionals with the knowledge, skills and abilities necessary to make independent judgments about the validity of clinical research and to implement evidence-based clinical practice in their careers. This course will focus on the concepts of evidence-based practice with emphasis on forming answerable clinical questions and effective literature search strategies. The evaluative approach to appraising the research literature will prepare the students to judge the evidence on: 1) the accuracy and validity of diagnostic tests and the application of important diagnostic tests in the care of a specific patient; 2) the effectiveness of clinical interventions; 3) the natural history of health-related conditions; 4) risk of harm from select preventative and therapeutic interventions. Based on presentation of case scenarios, students will be required to formulate the key question(s), rapidly search medical and health-related databases, appraise the evidence with a critical analysis and describe application of the evidence in a clinical context.

**CC 635 Case Report Methodology**
1 credit
This course will present an introduction to case report methodology. Critique of case report methodology and current literature will be included. The mechanics of writing a case report with the goal of publication will be emphasized. The course format will include lecture, demonstration and practice.

**CC 636 Survey of Qualitative Research**
1 credit
This course introduces the student to the major approaches used in conducting qualitative research and the application of these methods to problems and phenomena in practice. Importance is placed on the appropriate use of qualitative methods and differences across qualitative approaches.

**CC 710 Research Methods 2**
1 credit
The conduct of scientific inquiry requires careful planning and forethought to assure that the eventual implementation of a study will successfully result in interpretable and meaningful measurements and that valid conclusions may be drawn. This course will provide students with the necessary background and experience to formulate a clearly delineated, hypothesis-driven research proposal that can be used to convince funding agencies and/or doctoral committees to support the study. In addition, this course will provide key information about the Institutional Review Board process so that the student will be able to assure a safe and ethical environment for their volunteer subjects.

**CC 711 Research Methods 3**
1 credit
This course will introduce the student to important epidemiological methodology/concepts commonly used in evidence-based medicine. The student will be provided with information to aid in data collection and management, in designing tables and figures, and in writing manuscripts for peer-reviewed journals. The course will also include a review of basic biostatistical tests (such as chi-square distribution and related non-parametric tests), and how this information will help in designing tables/figures and in critiquing peer-reviewed papers.
CC 820 Practicum  
Variable credits  
The practicum experience is a unique and individual experience to supplement the student’s knowledge and experience from the student’s self-assessment negotiated with the Graduate Program Director. The practicum experience can be achieved in a variety of settings (research, education, clinical).

CC 844 Dissertation Residency  
4 credits  
Course required to maintain continuous enrollment in the University after completion of CC 899A and CC 899B until completion of the student dissertation. Each doctoral student will be required to complete a dissertation that is evidence-based and involves applied research of experimental, nonexperimental, or descriptive designs. Examples of dissertations include: randomized control trials; quasi-experimental designs, survey research, single-case/subject designs, normative research, and correlational designs. Course may be taken multiple times for credit (as CC 844A, CC 844B, etc.).

CC 899 Doctoral Dissertation  
9 credits  
Each doctoral student will be required to complete a dissertation that is evidence-based and involves applied research of experimental, nonexperimental, or descriptive designs. Examples of dissertations include: randomized control trials; quasi-experimental designs, survey research, single-case/subject designs, normative research, and correlational designs. Course is repeated once for credit (as CC 899A and CC 899B).

Specialty Courses by Program

Athletic Training

AT 601.2 Functional Orthopaedics  
2 credits  
This course covers the relationship between athletic injuries, the biomechanics of the injury as they relate to causes and their influence on treatment strategies. The relationship between weakness in musculoskeletal systems and their effect on recovery patterns will be discussed. Patterns of dysfunction that impede the recovery process will also be covered.

AT 604.2 Advanced Sports Nutrition  
2 credits  
This course is designed to extend beyond the basics of the science of nutrition and will focus on how nutritional variables effect physical exercise and competitive individuals in a variety of sport activities. The efficacy of nutritional supplements and various diet plans will be analyzed based upon evidence-based research. Methods of communication between athletes, parents, coaches, and medical staff to effectively transfer appropriate accurate information will be provided.

AT 606 Directed Independent Study  
3 credits  
This course is designed to facilitate the knowledge and awareness of the student in the type and extent of research that is pertinent to the field of Athletic Training. It will serve to develop the student’s thought on potential directions of in-depth studies that the student may pursue in seeking the advanced degree. Upon successful completion of this course, the student will be able to:

1. Identify areas of research presently conducted in the field of Athletic Training.
2. Inventory specific areas of research in the field of Athletic Training.
3. Conduct library research in a specific area of study in the field of Athletic Training.
4. Formulate a “review of literature” dealing with a specific area of study in the field of Athletic Training at the conclusion of this course.

AT 608 Scientific/Professional Writing  
1 credit
This course reviews PubMed, Index Medicus, other search methodologies, American Medical Association Manual of Style editorial format, the composition of a scientific/professional manuscript, and the style of Scientific/professional writing, its construction and formats.

AT 609 Qualitative Research 1  
1 credit
This course introduces the student to qualitative research methods and their applications to problems and phenomena in athletic training. Emphasis is placed on the appropriate use and differences of qualitative methods, their philosophical underpinnings, and application to clinical issues.

AT 612.2 Environmental Physiology  
1 credit
This course deals with the effects of environmental changes in weather, altitude, and pressure gradients as they relate to human performance. The symptoms and signs of heat stress and methods of correct treatment and resolution of the problem will be discussed. It will also cover effect of hyperbaric chambers on healing rates and other physiological parameters.

AT 613 Pathopharmacology  
2 credits
This course is designed to enhance the student’s knowledge on the theoretical and clinical principles of pharmacology. Selected pathological conditions common to physically active individuals will be addressed in relationship to pharmacological intervention methods. The effects of drug therapy on exercise that can impact the delivery of effective and safe treatment programs will be emphasized.

AT 615 Evidence-based Medicine in Advanced Therapeutic Modalities  
1 credit
An integral part of contemporary clinical practice is understanding the key elements of therapeutic modality applications as they relate to the healing process. This course provides an advanced analysis of how to search for and appraise published reports on therapeutic modalities and tissue healing. Students will acquire advanced knowledge and skill in interpreting the medical literature to make informed decisions regarding the best therapeutic modality applications, procedures, and protocols to use for individual patients.

AT 620 Foundations of Pedagogy  
3 credits
This course will incorporate a learner-centered approach to course development and instructional delivery. Assessment tools and strategies used to evaluate student learning will be emphasized. Students will demonstrate instructional techniques and strategies in the teaching of didactic competencies and clinical proficiencies based upon evidence-based teaching practices.

AT 650 Evidence-based Musculoskeletal Rehabilitation 1  
2 credits
This course will be taught from an evidence-based perspective and serve to advance students’ clinical skills related to the musculoskeletal rehabilitation process of common sports-related dysfunction. Students will be exposed to the current best evidence supporting commonly used interventions including therapeutic exercise and manual therapy. Critical thinking will be emphasized allowing students to compare and contrast protocol-based vs. criteria-based rehabilitation approaches of the extremities while emphasizing the current best evidence related to the concept of regional interdependence.
AT 651  Evidence-based Musculoskeletal Rehabilitation 2  1 credit
This course will be taught from an evidence-based perspective and serve to
advance students’ clinical skills related to the musculoskeletal rehabilitation
process of spinal dysfunction commonly seen in athletes. Students will be
exposed to the current best evidence supporting commonly used
interventions including therapeutic exercise and manual therapy. Critical
thinking will be emphasized, allowing students to compare and contrast core
training program with an emphasis in the motor control model of spinal
stabilization. The course will expose the student to the current best evidence
related to the concept of regional interdependence as it applies to spinal
dysfunction.

AT 703  Evidence-based Therapeutic Exercise Systems  2 credits
This course will cover the current best evidence related to non-contact injury
risk factor assessment. Evidence-based injury prevention will be taught
through screening and testing which will serve to guide corrective exercise
intervention strategies. Students will be exposed to injury prediction/prevention research and gain clinical skills in performance of
selected movement testing and corrective exercise. A component will
include development of an evidence-based injury prevention program driven
through the athletic pre-participation exam for different setting including high
school outreach, collegiate, and community based programs.

AT 704.2  Curriculum Design  3 credits
This course will prepare students to compare and contrast various curriculum
classic theory and relate each to athletic training education and curriculum
development.

AT 706  Directed Independent Study  3 credits
Students will prepare and demonstrate instruction (via video) of 2
instructional lessons based upon the principles presented in AT 620
Foundations of Pedagogy. The 2 lessons should complement each other in
didactic and clinical mode. Emphasis will be on the instructional design,
delivery, and assessment of learning process. Content will be credible and
evidence-based (referenced). Upon completion of this directed independent
study, the student will be able to:
1. Develop a learner centered syllabus (2) for a (1) didactic athletic training
course and (2) clinical athletic training course associated with the
didactic course.
2. Develop a didactic session utilizing a specified learning theory/technique
in design and process.
3. Develop a clinical lesson utilizing a specified learning theory/technique
and design process.
4. Demonstrate pedagogy knowledge of active learning instructional
techniques and course development.
5. Utilize instructional media resources.
6. Demonstrate use of referenced and evidence-based information in the
instructional sessions.
7. Choose appropriate strategies and techniques to evaluate student
learning. One of the strategies must include a rubric (analytic or holistic)
8. Submit a 3 page reflective paper on your analysis and learning
experiences of this directed independent study.

AT 708  Grant Writing Practices and Principles  1 credit
This course is designed to provide the resources needed to research and
secure grant opportunities for a variety of research and non-research efforts.
An overview of the structure and process utilized in preparing grant applications will be a major focus.

**AT 715 Epidemiology of Athletic Injuries 1 credit**
This course will expose the student to epidemiological concepts related to causes of sport related injuries. This course will look at the historical, present and future methods of conducting injury surveillance studies. This course will enable the student to understand injury trends and potential epidemics that contribute to the multi-factorial cause of injuries related to athletic and sport competition.

**AT 726 Directed Independent Study 3 credits**
This course will consist of the student performing a pilot research study in the area of Athletic Training. The topic to be covered will be mutually agreed upon by the instructor and the student. The student will generate a hypothesis, review of literature, methods, results and discussion sections. The student will describe the process necessary to develop a formal pilot research study, and demonstrate the ability to perform a non-formal pilot study. Describe the various sections pertinent to developing formal research such as a hypothesis, methods of data collection, analysis of results, discussion and conclusions. Upon completion of this course, the student will be able to:

1. Present a proposal for the pilot study as an extension of DIS AT 616.
2. Identify the objectives, hypothesis and scope of the pilot study.
3. Describe the methods for data collection to be used in the pilot study.
4. Describe the measurements to be considered in the pilot study.
5. Identify confounding variables that may interfere with the completion of the project.
6. Identify methods of data analysis to be used.
7. Submit a completed pilot study on a subject agreed to by faculty and the GPD.

**Clinical Electrophysiology**

**EP 712 Kinesiological EMG 1 credit**
Introduction to kinesiological EMG, analysis of kinesiological EMG, comparison of surface and fine wire EMG, overview of available EMG equipment for use in clinical studies and literature review. Literature review, lecture, discussion and demonstration.

**EP 718 Electromyography and Nerve Studies 3 credits**
This course is intended to assist the student in properly evaluating patients with major pathology. Students will be assigned a specific patient case/diagnosis, such as, carpal tunnel syndrome, S1 radiculopathy, diabetic polyneuropathy, etc. They will research the available literature, develop an EMG and nerve study plan, present their findings, discuss the topics including the importance of establishing the differential working diagnosis, a preliminary step to designing a clarifying electrophysiological examination, and perform specific tests in a laboratory setting. Literature review, discussion, practice and practical examination.

**EP 719 Dissertation Prep Course 1 credit**
This course will prepare students for the dissertation phase of the degree program. Students will have secured a committee and have developed an outline of their dissertation topic prior to taking the course.
Health Promotion and Wellness

**WE 600 Introduction to Health Promotion and Wellness**  
2 credits  
This course will provide an overview of the concepts of health promotion, health education, public health, primary prevention, lifestyle, behavior, and wellness and, based on evidence, their relationships to each other and to secondary and tertiary care. The historical relevance of and evidence for focusing on individual and social determinants of health will be explored and an ecological model combining both approaches will be introduced. Typical intervention sites for effective health promotion programs will be discussed as well as a framework for implementing programs. Class format will include journaling to develop a personal wellness philosophy, lecture, and small group activities.

**WE 601.2 Epidemiology**  
2 credits  
This course will provide an introduction and overview of the scientific foundations of health promotion and wellness. Emphasis will be placed on the fundamental principles of epidemiology as they apply to the prevalence and distribution of lifestyle-related disease. The course will enable students to analyze problems and make decisions based on applications of epidemiologic concepts and methods in a variety of health promotion settings. The use of vital statistics and rates, and descriptive, observational, and experimental studies will be discussed and applied to the environmental, social, physical, and biological determinants of health and disease. Class format will include lecture, article reviews, and small group activities.

**WE 603 Research Literacy**  
1 credit  
In this course, students will have the opportunity to read, critique and discuss current research in health promotion. The primary purposes of this course are to enable students to be informed consumers of health promotion and wellness research, to identify and understand the critical components in research manuscripts, to coherently discuss strengths and limitations in a variety of research studies, and to determine how to incorporate sound evidence into practice. Class format will include lecture, article reviews, and presentations.

**WE 606 Directed Independent Study**  
3 credits  
The student will select a health-related behavior, such as physical activity, helmet or seat belt use, oral healthcare, and conduct a literature review to identify evidence for both the individual and social influences on the chosen behavior. With instructor approval of the topic, a minimum of 10 articles should be selected, annotated and utilized to write a paper in which the student will advocate for one approach as the best means to accomplish behavior change in an identified population.

**WE 608 Risk Factors and Risk Reduction Strategies**  
2 credits  
The evidence related to risk factors for disease due to lifestyle choices will be reviewed and discussed in this course, including but not limited to smoking, nutritional choices, obesity, inactivity, diabetes, social support, and stress. Evidence for the prevention of diseases through the adoption of healthy behaviors will also be discussed, such as osteoporosis and cancer. Strategies for adopting positive health-related behaviors will be explored. Class format will include lecture, small group activities, and a group project.
Nursing

NU 602 State of Nursing Science 1 2 credits
This course examines the structure and growth of contemporary nursing knowledge and theory as it developed within a social context. Ideas, events, people, and writings are examined for their influence, inter-relationships and significance to nursing as students reflect on the philosophies and theories that guide their practice. The process of concept analysis and theory generation will be underscored. The course discusses a connection to nursing research, theory, and practice. The empirical foundation of nursing practice, the analysis of nursing knowledge and theories and their applicability to applied clinical nursing practice will be explored. Dialogue will center on the refinement of critical thinking skills in analyzing existing practice for theory implications. Selected concepts will be analyzed with emphasis on implications for evidence-based practice. Interrelationships among theories, practice and research will be stressed.

NU 604 State of Nursing Science 2 2 credits
The course extends the discussion on the connection to nursing research, theory, and practice. The empirical foundation of nursing practice, the analysis of nursing knowledge and theories and their applicability to applied clinical nursing practice will be explored. Dialogue will center on the refinement of critical thinking skills in analyzing existing practice for theory implications. Selected concepts will be analyzed with emphasis on implications for evidence-based practice. Interrelationships among theories, practice and research will be stressed.

NU 626 Directed Independent Study 3 credits
Students will develop a qualitative research proposal and demonstrate the ability to conduct interviews with informants, maintain field notes, and collect archival/historical data as appropriate and record data. The DIS should be used to pilot the interview guide that the student plans to use in his/her proposal. The student will use the acquired data to practice coding and theme analysis. The student will summarize, compile and report qualitative data, in both narrative and visual display formats in the final project report.

NU 705E Vulnerable Populations in a Global Health Perspective 1 credit (Elective)
This course conducts a social deconstruction of the dimensions within the healthcare system for vulnerable populations in a global health perspective. The students will examine the burden of disease within social, political, economic, and environmental contexts. Contemporary nursing knowledge, theory, and epidemiological evidence will be examined for barriers with vulnerable populations. Students will reflect on their own value system, philosophies, theories, and public health models that guide their practice and research. Professional nursing and healthcare organizations that advocate for vulnerable populations worldwide will be discussed. Strategies to increase global nursing consciousness will be explored.
Orthopaedics & Sports

**OS 601.2 Clinical Anatomy, Biomechanics, and Pathophysiology of the Spine**
3 credits
This class will study the clinical application of anatomy, biomechanics and pathophysiology of the spine to examination and intervention techniques in patients with spinal dysfunction. Its focus will be on the integration of basic sciences with application to clinical decision-making regarding disposition and intervention. Surgical procedures and their impact on rehabilitation techniques and functional progression will be discussed. Students will choose a specific area of interest and prepare a 20-minute presentation on the topic. The class format will include oral presentations, lecture, demonstration, videos and cadaver dissections.

**OS 604 Clinical Anatomy, Biomechanics, and Pathophysiology of the Lower Leg, Ankle and Foot**
2 credits
This course covers the clinical anatomy, biomechanics, examination, disposition and rehabilitation of injuries to the lower extremity (leg, foot, and ankle). Its focus will be on integration of basic sciences with application to clinical decision-making regarding disposition and intervention. Surgical procedures and their impact on interventions and functional progressions will also be discussed. Students will choose a specific area of interest and prepare a 20-minute presentation on the topic. Instructional modalities will include oral presentations, lecture, demonstration and practice.

**OS 605 Clinical Anatomy, Biomechanics, and Pathophysiology of the Hip and Knee**
2 credits
This course covers the clinical anatomy, biomechanics, examination, disposition and rehabilitation of injuries to the hip and knee. Its focus will be on the integration of basic sciences with application to clinical decision-making regarding disposition and intervention. Surgical procedures and their impact on interventions and functional progressions will also be discussed. Instructional modalities will include oral presentations, lecture, demonstration and practice.

**OS 710 Neurobiology of Pain and Its Management**
1 credit
This course examines the neurobiology and current theories of pain and its management. Included is a review of the physiology of pain, peripheral and central mechanisms, and associated interventions. Information will be applied to clinical problems such as chronic back pain, fibromyalgia, myofascial pain and neurogenic pain. The course will include discussion of appropriate measurement and outcome tools, and will be taught in a lecture and case study format.

**OS 716 Directed Independent Study**
3 credits
This course will emphasize the advanced critique of the literature. Students will select 5 research papers on a topic of interest. Papers selected should use quantitative research methods. Review and abstract the paper according to established guidelines. Following the abstract process, review the methods section thoroughly. Describe how you would change the methods if you were to do the research. Be sure to include why you would make those changes and provide references for such (i.e. changes to improve reliability, validity, etc. and cite methodology literature). This can be done in text form, table form, outline form or whatever style works for you. If there are pros and cons (as there often are) to your recommended changes (such as improving internal validity at the expense of external validity) be sure to include these relative advantages and disadvantages as well as
recommendations for achieving appropriate balance.

### Pediatric Science

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>P 606.2</td>
<td>Literature Analysis &amp; Synthesis: Directed Independent Study</td>
<td>3</td>
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<tr>
<td></td>
<td>In addition to lecture and discussion on literature analysis and synthesis techniques, a WebStudy learning component involves participation in frequent web-discussions and analysis of literature on selected, controversial topics in pediatric therapy. Students will build arguments using synthesis of literature to support or refute their perspectives. This course is intended to build competency in literature analysis and synthesis in preparation for scientific writing and for the doctoral dissertation.</td>
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<tr>
<td>P 616.2</td>
<td>Instructional Design: Directed Independent Study</td>
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<td>Students will design a 40-minute instructional session selected from a list of topics in pediatrics outlined to prepare practitioners for the pediatric specialist certification examination (physical therapists) or pediatric board certification application (occupational therapists). The instructional project will include design and interpretation of a needs assessment, submission of detailed lesson plans, incorporation of principles and active learning activities presented in P 620, and design and administration of a multiple choice examination question for each learning objective.</td>
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<tr>
<td>P 620</td>
<td>Pedagogy in Higher Education</td>
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<td></td>
<td>This course will incorporate a learner-centered approach to course development and instructional delivery. Assessment tools and strategies used to evaluate student learning will be emphasized. Students will demonstrate instructional techniques and strategies in the teaching of didactic competencies and clinical proficiencies.</td>
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<tr>
<td>P 714</td>
<td>Single System Designs in Pediatric Therapy</td>
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<td>Introduction to single system (single subject) designs for measuring clinical change in pediatric practice settings. Students will develop and submit a single system research design related to a proposed dissertation topic or relevant clinical question.</td>
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<tr>
<td>P 715</td>
<td>Neuromuscular Electrical Stimulation for Children with Cerebral Palsy</td>
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<td>Current concepts and advances are presented in the clinical use of neuromuscular electrical stimulation (NMES) in pediatric therapy. Management decisions on child selection, muscle selection, and equipment options are discussed from research and clinical literature perspectives. Current concepts on movement science, spasticity, and intervention for children with cerebral palsy are presented. An overview of NMES equipment is provided.</td>
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<tr>
<td>P 721.2</td>
<td>Scientific Writing and Electronic Library Evidence</td>
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<td>Resources and Searching Techniques</td>
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<td>Overview is provided regarding structure and process of scientific writing for the medical literature including writing mechanics, common problems in medical writing, steps in preparing for publication, and processes for research grant applications. Orientation to the electronic library is conducted and techniques for searching evidence-based practice questions are reviewed.</td>
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</table>
P 724 Embryologic and Fetal Development: Implications for Neonatal Care  
1 credit  
An overview is provided of the development of body systems (cardiovascular, gastrointestinal, respiratory, genitourinary, musculoskeletal, face/neck region) and the basis for major anomalies of these systems is identified. Examination of embryologic and fetal development of the central nervous system and sensory systems are included with implications for preterm and other infants in the neonatal intensive care units.

P 729 Topics in Sensory Processing in Infants and Children  
1 credit  
This course provides an overview of new terminology and a nosology related to Sensory Processing Disorder (SPD). Linkages will be highlighted between SPD and difficulties with daily life performance. New SPD research including psychophysiological and behavioral outcomes will be presented as well unique patterns discriminating children with SPD from children with typical development or with other diagnoses. A new model for the treatment of subtypes of SPD will be analyzed with underlying neurological theory and clinical reasoning emphasized. Assessments for sensory and motor functioning will be presented and their use highlighted in theory-based decision making during designs of intervention plans.

Post-professional Doctorate Programs

Doctor of Nursing Practice

DNP 600 Transformational Leadership in Advanced Practice  
2 credits  
This course examines the emerging literature on evidence-based management, and the use of evidence in decision-making, resource management, and strategic planning. Issues of power, innovation, interprofessional collaboration, change, and leadership/healthcare delivery models are addressed. Self-reflection, self-mastery, professional integrity and credibility, interprofessional collaboration, and other leadership-related concepts are themes that underpin the course.

DNP 601 Creating an Evidence-based Practice Environment  
2 credits  
Evidence-based clinical practice to achieve the most effective outcomes is a major focus in healthcare. This course underscores the synthesis of the best research evidence with clinical expertise and client values to direct practice decisions for the best health outcomes. An emphasis will be placed on how research questions are formed, finding and appraising evidence, and how research can be transformed to develop new clinically relevant knowledge. Models and processes of evidence-based practice will be introduced to promote strategies for best practice and quality improvement of healthcare.

DNP 602 Health Policy  
1 credit  
Students will be given the opportunity to weigh the impact of organizational, professional, and governmental policies on their practice and lead changes in the broader policy arena to improve practice.

DNP 603 Informatics and Evidence-based Information  
1 credit  
This course is designed as a survey course for the advanced clinician to explore major existing and emerging technologies and their potential impact. Systems are addressed that support patient centered, safe, effective, timely, efficient and equitable care. An emphasis is placed on the role that information technology supports these systems and on development and use of technologies in 21st century healthcare. Electronic medical records
(EMRs), patient safety systems such as bar-coding medication systems and event reporting systems, tele-health modalities from remote monitoring in ICUs to patient homes, web-enabled implantable devices, and web-based patient and professional education are among the topics explored.

**DNP 605.2 Data and Decision-making in the Healthcare Environment**
2 credits

This course focuses on critically and effectively applying data within the context of the student's capstone project. The course builds on research specific to methodology and statistics necessary for translating data into information. The critique of the reliability, validity, and relevance of data is emphasized.

**DNP 606 Directed Independent Study: Specialization Residency**
4 credits

This DIS provides the student an opportunity to develop competence in a specialty area of interest. The student, in coordination with the GPD, will select an area of specialization (i.e., wellness, executive leadership, systems, pharmacology, gerontology) with an emphasis on interdisciplinary collaboration. The DIS supplements the theory coursework and includes opportunities to synthesize prior learning while observing, testing, and evaluating theories and evidence-based clinical practice. The DIS requires the selection of one or more approved advanced practice leaders as a preceptor. Learning activities are agreed upon by the student, preceptor, and faculty, and meet the objectives of the DIS.

**DNP 607 Legal and Ethical Issues in Advanced Practice Nursing**
1 credit

This course focuses on approaches to implement recent Institute of Medicine recommendations within an ethical context. Patient safety and privacy, developing interdisciplinary systems and structures to improve the quality of patient care, risk management, and ensuring compliance with laws and healthcare regulations such as HIPAA will be explored. The course highlights the development of effective strategies for managing the ethical dilemmas inherent in organizing evidence-based healthcare delivery at the individual, organizational, or systems level.

**DNP 608.2 The Advanced Clinician as Communicator**
1 credit

This course is designed to provide a broad introduction to human communication in a healthcare context. The course will highlight issues such as provider-client communication, intraprofessional communications, intercultural health communication, and alternative medicine. The course explores the use and critiques of various communication strategies in the change process. The course will address effective communication strategies to implement change. Topics: marketing, conflict management and use of communication media for various audiences.

**DNP 610 Capstone Project Seminar 1**
1 credit

In this course, an overview of project planning will be highlighted including emphasis on project management, planning the project and developing a mission, vision, goals, and objectives for the project. Each student will contract with the GPD to plan, initiate, and evaluate a research-based change in advanced practice nursing that is evidence-based and involves applied research.

**DNP 611.2 Capstone Project Seminar 2**
2 credits

Continued project planning will occur including emphasis on project management, producing a workable schedule, and project control and evaluation. Final planning of the DNP project will occur. Each student will finalize with GPD and mentor his/her plan to structure a change project in
advanced practice nursing that is evidence-based and involves applied research.

**DNP 612.2 Role Transformation**
*1 credit*
This symposium course explores role socialization, advancement of clinical and leadership abilities, new opportunities, and marketing the advanced practice role. Additional discussion will occur regarding how to organize care to address emerging clinical problems. Cost effectiveness for evaluating clinical initiatives will be focused.

**DNP 613 Healthcare Economics**
*2 credits*
The course will explore the principal ways US healthcare is structured and financed at the national, state, and local levels, and how policy affects the healthcare environment. Current and emerging issues and principles of business finance related to clinical care delivery will be analyzed using case studies and participative learning experiences. Implications for advanced practice leaders will be explored.

**DNP 614 Outcomes Management and Evaluation**
*2 credits*
This course outlines the impact the advanced practice nurse on healthcare delivery and fulfillment of care structures outcome measurements in the advanced practice setting in an evidence-based practice model. Topics include the history and evolution of quality of care measurement and improvement and their influence on contemporary methods for assuring high quality care in the United States; approaches to and challenges of assessing patient outcomes, especially self-reported outcome; and use of outcome measurement frameworks, selection of outcome measures and use of outcome data in the clinical practice setting. Practice improvement, innovation and testing of interventions and care delivery models, and evaluation of healthcare outcomes are explored.

**DNP 615 Scientific Writing**
*1 credit*
This lecture course reviews PubMed and search methodologies, American Psychological (APA) editorial format, the composition of the introductory paragraph, and the style of scientific writing, its construction and formats.

**DNP 616 Directed Independent Study: Health Policy Residency**
*4 credits*
This DIS provides the student an opportunity to develop competence in health policy. The student, in coordination with the GPD, will select an area of local, national, or international focus and emphasis on building coalitions and working with a public or private organization to create policy-level changes for practice. The student will be given the opportunity to weigh the impact of organizational, professional, and governmental policies on practice and lead changes in the broader policy arena to improve practice. The DIS supplements the theory coursework and includes opportunities to synthesize prior learning while observing, testing, and evaluating the effect of health policy on evidence-based clinical practice. The DIS requires the selection of one or more approved advanced practice leader as a preceptor. Learning activities are agreed upon by the student, preceptor, and faculty to meet the objectives of the DIS.

**DNP 617 Theoretical/Conceptual Thinking: Application for Practice**
*1 credit*
This course explores the theoretical foundations of practice, the conceptual models to implementation research, and strategies to implement evidence-based approaches to practice projects. Learning focuses on the application of theory-directed design, implementation, and evaluation while applying evidence to transform healthcare systems.
DNP 797  Capstone Project  10 credits
Each doctoral student will be required to complete a capstone project that is an evidence-based practice project and involves applied research. There are four steps that are completed after IRB approval of the capstone project. These steps include: (a) conduct a needs assessment; (b) design an intervention based upon your needs assessment using the current evidence on the topic; (c) deliver that intervention; and (d) evaluate the outcomes of your intervention. The evaluation should include financial, clinical, or educational components as appropriate to the project.

DNP 798  Capstone Oral Presentation  1 credit
Each student will share his/her completed capstone project in an oral presentation. The oral presentation must be completed within 6 months of capstone project complete or the student must enroll in additional capstone course credit. Policies and guidelines are posted online.

Post-professional Doctor of Occupational Therapy & Transitional Doctor of Physical Therapy

Core Courses

CC 506  Qualitative Research  1 credit
This course introduces the student to the major approaches used in conducting qualitative research and the application of these methods to problems and phenomena in a variety of therapy practice areas. Importance is placed on the appropriate use of qualitative methods and differences across qualitative approaches.

CC 507.2  Critical Inquiry 1: Quantitative Issues in Published Research  1 credit
This course will involve the study of data analysis, statistics, and results reported in scientific literature for the physical and occupational therapist. Basic and advanced topics in statistics will be reviewed with an emphasis on interpreting data analysis methods and results commonly reported by authors in occupational and physical therapy literature. Students will learn to use the course text as a reference to understand and interpret statistics reported in journal articles, and to make judgments about the appropriateness of reported methods, interpretations, and conclusions based on research design, data reported in the articles, and consideration of assumptions underlying applied statistical methods. Examples from current occupational and physical therapy literature will be cited throughout the course to illustrate concepts and improve students' ability to interpret and critique the work of others. Foundational knowledge from this course is needed for the Evidence-Based Practice concepts presented in CC 527.

CC 510.2  Pharmacology  1 credit
This course will increase the experienced occupational and physical therapist's understanding of the impact prescribed and OTC drugs will have on the outcome of therapy interventions. The basic text will be augmented by research studies and systematic reviews that support the use of specific medications for patients/clients who have medical conditions commonly seen by therapists. Therapists who have a general understanding about the pharmacodynamics and pharmacokinetics of commonly prescribed medications, provide a valuable resource to the medical team. Special emphasis will be placed on applying this knowledge to a spectrum of health professional practices.
CC 527  Critical Inquiry 2: Evidence-based Practice  
1 credit
This course is designed to prepare healthcare professionals with the knowledge, skills and abilities necessary to make independent judgments about the validity of clinical research and to implement evidence-based clinical practice in their careers. This course will focus on the concepts of evidence-based practice with emphasis on forming answerable clinical questions and effective literature search strategies. The evaluative approach to appraising the research literature will prepare the students to judge the evidence on: 1) the accuracy and validity of diagnostic tests and the application of important diagnostic tests in the care of a specific patient; 2) the effectiveness of clinical interventions; 3) the natural history of health-related conditions; 4) risk of harm from select preventative and therapeutic interventions. Based on presentation of case scenarios, students will be required to formulate the key question(s), rapidly search medical and health-related databases, appraise the evidence with a critical analysis and describe application of the evidence in a clinical context.

CC 533.2  Educational Interventions in Practice  
1 credit
This course will introduce the student to the latest evidence for planning, implementing, and assessing effective educational interventions in occupational therapist and physical therapist practice. Course content is focused on clinical application using a process model of educational intervention and includes: educational theory related to learning by children and adults, effective teaching strategies, and health promotion/disease prevention concepts. The student will also be introduced to application of Microsoft® PowerPoint in the development and delivery of multimedia presentations for private and public consumption.

CC 540  Marketing and Customer Service  
1 credit
This course provides an important decision-making framework for positioning and branding healthcare services. The course considers emerging trends in healthcare and issues relevant to effective program design, distribution, pricing, and promotion. Participants will develop sound marketing, public relations, and customer service plans. The course covers the fundamentals of marketing strategy. Emphasis is placed on the application of these concepts to marketing decisions with the goal of developing or enhancing students’ skills at critically thinking about marketing management issues. Students learn how to integrate and apply marketing theory and strategies to health-service programs and practice.

CC 562.3  Principles of Practice Development and Marketing  
1 credit
This class will provide the students the basic information and tools necessary to develop and write a business and marketing plan to open or expand an outpatient PT or OT clinic. Additional ideas will be presented for settings other than traditional outpatient.

CC 564.2  Occupational & Physical Therapy Interventions: Evidence-based Practice Analysis  
2 credits
Contemporary clinical practice patterns are heavily influenced by emerging evidence on the effectiveness of frequently used treatment interventions. This course empowers students to develop focused clinical questions pertinent to their individual clinical practice and utilize the most effective online search strategies of relevant medical databases. Students will learn to quickly and efficiently identify articles most likely to answer their clinical questions while implementing a practical and systematic process for critically evaluating professional journal articles. Ultimately, students obtain the
essential tools to improve their confidence in selecting the most effective evidence-based interventions for individual patients.

**CC 601 Transformational Leadership 1 credit**
This course examines current research and practices of transformational leadership skills and behavior. The influence of emerging technologies, shifting accountabilities between providers and consumers, and changing healthcare practices will be examined in relation to evolving leadership principles and characteristics for the 21st Century. Tools of evidence-based management will be analyzed for their contribution to developing leadership. Issues of change, creativity and innovation, inter-professional collaboration and leadership/healthcare delivery models are addressed. Self-reflection, self-mastery, professional integrity, credibility and other leadership-related concepts are themes that underpin the course.

**CC 637 Case Report Methodology 1 credit**
This course will progress the clinical practitioner's knowledge of advanced case report/series methodology, both as a consumer and producer of evidence. A combination of lecture and practical exercises will include effective use of summary techniques and ranking of reports in the evidence hierarchy. The goal is to prepare the student to efficiently report his/her own clinical work in conjunction with the Directed Independent Study projects (if applicable).

**Elective Track Courses**

**AG 550 An Integrated Biology-Psychology-Sociology View of Aging 1 credit**
This course will present an introduction to and literature review of the psychosocial and biological dimensions of aging, to include the major psychological theories of aging. It will include a discussion of demographics and cohorts, and include topics such as psychological theory, retirement, relationships, issues of chronicity and death and dying, environment and social support systems. Issues related to death and dying across cultures will be explored. The course format will consist of lecture and discussion.

**AG 551 Aging: Neurodegenerative Diseases 1 credit**
This course will present typical changes occurring in the aging nervous system. This will include normal changes as well as deviations from normal as they relate to function and behavior. The pathology and management of Alzheimer’s disease, Parkinson’s disease, and other disorders relevant to the older adult will be discussed. Pharmaceutical management will be included, which will be complementary to the pharmacology course (CC 510.2). The course will include case study, lecture and discussion.

**AG 552 Exercise Interventions for Aging Adults 1 credit**
This course is an inquiry into physiological capacity of older adults with particular emphasis on the role of exercise as a life prolonging intervention. Focus is on the best available evidence to maintain vitality and mobility in aging adults facing problems of the cardiopulmonary, musculoskeletal and nervous systems. Interventions related to aerobic & anaerobic fitness as well as strength training, flexibility and balance will be emphasized.

**AM 550 Organizational Development and Human Resources 1 credit**
This course is designed to teach practical skills for managing human assets from the perspective of the healthcare administrator. Topics include best practices in recruiting, compensation, employment law, performance
evaluation, developing and managing people successfully, and dealing with
difficult conversations. Students learn how human assets have the potential
to be a source of sustainable competitive advantage in high performance
organizations. The course focuses on motivation, communication, decision-
making, conflict resolution, and adaptation to change. Theories are applied to
human-resource problems and administrative processes in healthcare
organizations.

AM 570  Financial Analysis and Performance  1 credit
Students in this course will learn to apply financial concepts to case
situations, and will be introduced to concepts used in corporate and small
business finance. Participants learn how to read and use financial statements
in order to monitor and improve financial and productivity aspects of
healthcare organizations. Topics include financial statement analysis,
financial math, and forecasting, budgeting, estimation of a firm’s required
return, and value-added analysis. Topics are focused on financial strategies
from the prospective of practice managers, healthcare administrators,
lenders, and investors.

MT 508  Advanced Practicum  1 credit
Building on MT 550, this challenging directed independent study course with
a single weekend component is structured to provide hands-on
demonstration and practice of both examination and selected interventions of
the shoulder, elbow, wrist and hand. The lab focuses predominantly on
becoming proficient in a core set of manual physical therapy techniques.
However, exercise strategies that complement a manual therapy approach
are integrated throughout.

MT 550  Manual Therapy for the Upper Quarter  3 credits
This course integrates manual therapy and exercise intervention techniques
in the management of individuals with upper extremity disorders. A
combination of lecture and lab session (MT 508) will be utilized to facilitate
student learning.

P 544  Pediatric Differential Diagnosis and Medical
Screening for Practitioner Referral  1 credit
This course is designed to enhance the skill level of physical and
occupational therapists working with children in conducting selected portions
of an examination which include taking a history for the pediatric client,
reviewing systems beyond the system(s) typically of concern to therapists,
addressing health promotion with children and families, and recognizing
signs and symptoms that indicate the need for a referral to another health
practitioner. The student is expected to bring knowledge of tests and
measures and examination procedures unique to the respective discipline.

P 603  Measurement in Pediatric Therapy  1 credit
This course applies concepts and principles of measurement to pediatric
clinical practice including instruments and clinical observation protocols to
measure development, sensory and motor performance, functional tasks,
quality of life, and sensory processing. Psychometric properties of
instruments are analyzed and measurement of clinical change is
emphasized.

P 703  Seminar on Children and Youth In Early Intervention
and Education Environments  1 credit
This course will include discussion and application of laws, practice
guidelines, and service delivery models for early intervention and school-
based practice settings. Development and use of individualized family service plans and individualized education programs are addressed. Clinical decision-making frameworks are used with peer-reviewed literature to analyze and support selected interventions through case-based presentations.

OTD Specialty Courses

OTD 504 Advances in Occupational Therapy Practice  1 credit
In this course, students engage in self-reflection and clinical reasoning to examine how they meet the academic and professional competencies required for doctoral level practice. Students critically analyze The Occupational Therapy Practice Framework as a resource for addressing relevant practice concerns. Particular attention is paid to understanding current professional trends including those representing advances in global, national, state, and local organizations. Instructional methods include self-study, lecture review of pertinent material, cooperative learning, and a culminating paper.

OTD 505 Occupational Therapy: Conceptual Foundations  1 credit
Occupational science is the study of the meaning of human engagement in occupation. Students will analyze the elements, relationships, and organizational principles of human occupation. Current research in occupational science is examined, including trends in occupation-based theories. Students will identify and analyze occupation-based assessment and intervention tools. Students will demonstrate how occupation is used as the primary modality to design treatment interventions, across a range of practice settings and client profiles.

OTD 509 Professional Development and Evaluation  3 credits
In this course students demonstrate their commitment to becoming practice-scholars through the development of a professional portfolio that demonstrates competency in an evidence-based practice specialty reflecting the value of occupation as process and ends. The course will facilitate the student’s transition to his or her role as evidence-based practitioner, clinical educator, healthcare administrator or other identified professional areas of practice. Students develop individualized professional goals including a three-year plan for professional development. Students synthesize and integrate key curricular concepts presented during semester one.

OTD 511 Evaluation of Occupational Therapy Interventions:  1 credit
Health Policy and Outcomes Research
This course serves as an introduction to health policy in the United States and the utilization of outcomes research to support policy development. Students differentiate between goal attainment and outcomes research and identify and evaluate measurement instruments used to assess the impact of occupational therapy intervention. Critical analysis of the role of outcome measurements as part of an evidence-based practice model will be undertaken. Case-based learning methodologies are used to allow students to make critical judgments in specific examples.

OTD 512 Occupational Therapy Capstone Seminar 1  1 credit
A practice-scholar embeds research in everyday practice to answer central questions and/or provide evidence unique to his/her context of practice. Students explore literature underlying the paradigms of practice-scholarship and clinical competence to evaluate the degree to which they meet criteria for excellence and leadership in their respective areas of practice. Students
receive instruction in professional development methods and exercises to
guide their development of a reflective portfolio and professional
development goal.

TOTD 511 Evaluation of Occupational Therapy Interventions: 1 credit
Outcomes Management
This course explores and stresses the importance of the utilization of
measurement tools or outcome tools to assess the effect of occupational
therapy intervention. Students will critically analyze the role of outcome
measurements as part of an evidence-based practice model. Topics will
include the origins and development of outcome tools; the basis and
importance of outcomes research; the importance of outcome tools to
manage healthcare delivery and best practice; the selection and availability
of a variety of outcome tools for different occupational therapy areas of
practice; the challenges for their implementation in any occupational therapy
practice setting.

TOTD 529 Directed Independent Study 4 credits
This course is designed to provide the student the opportunity to intensively
explore an area of professional interest integrating the essential elements of
evidence-based practice.

TOTD 545 Issues in Medical Ethics 1 credit
Various aspects of ethical practice of healthcare will be addressed. A survey
of ethical theories, models of ethical decision-making, and major
contemporary healthcare issues and dilemmas facing the occupational
therapist will be taught using actual case studies. Topics such as conflicts of
interest, ethical communication, informed consent, autonomy and the right to
refuse care, and justice and cost control will be included.

TOTD 571 Leadership in Occupational Therapy Practice 1 credit
This course will present an overview of leadership principles and relationship
management using the Emotional Intelligence Model within the context of our
profession. Special emphasis will be placed in the student’s self-evaluation
of leadership skills and self-exploration of leadership attributes such as
beliefs system, values, skills, ethics, etc. Exploration of leadership principles
as it applies to healthcare and education, as well as exploration of
differences between concepts of being a “leader” and being a “boss” will be
performed. Students will also be able to review and apply behavioral science
approaches to motivate, support, promote team building, manage conflict,
and be effective leaders.

TDPT Specialty Courses

TDPT 503 Foundational and Clinical Sciences 1 credit
Students will be introduced to the foundational sciences related to normal
and abnormal structure, function, and response to injury and disease to
enhance physical therapy outcomes.

TDPT 505.2 Evidence-based Concepts of Musculoskeletal Imaging 1 credit
This course is designed to cover the fundamental principles of radiographic
imaging procedures. Integrates the diagnostic utility of imaging procedures
into clinical decision-making. Develops skills necessary to recognize
common normal and abnormal radiographic findings of the extremities, spine
and CNS.

TDPT 508 Directed Independent Study 4 credits
This progressive directed independent study project provides each student with an individually tailored opportunity for an evidence-based reflective analysis of patient care. Using the evidence-based skills and competencies gained from all courses in the first session, this project allows the experienced physical therapist to carefully analyze care administered for a selected patient in relation to current best evidence.

**TDPT 513**  
**Clinical Exercise Physiology**  
1 credit  
This course will increase the experienced clinician’s understanding of the latest concepts in clinical exercise physiology, as well as the relationship between fitness and wellness. Evidence-based physiological principles underlying the human response to exercise are discussed as they relate to the healthy adult. Some examples are provided regarding how these principles may be affected in the adult with diabetes and cardiovascular disease. Planning, implementation, and evaluation of various tests are presented primarily in an interactive lecture format.

**TDPT 528**  
**Directed Independent Study**  
4 credits  
This challenging directed independent study project allows each student to apply advanced skills in evidence-based medicine to his or her own clinical practice. A diagnostic category of patient is selected by the student for a case series. Physical therapy care is then administered for 3 consecutive patients with that diagnosis according to best evidence. The care administered in the case series is documented in the format of a suitable journal. Students not in clinical practice will be provided the opportunity to complete other evidence-based projects similar in complexity as negotiated with the Graduate Program Director.

**TDPT 544.2**  
**Evidence-based Differential Diagnosis & Screening in Physical Therapist Practice**  
2 credits  
This course discusses advanced concepts of evidence-based diagnosis as related to physical therapist practice. Participants will learn diagnosis and screening strategies suitable for a wide spectrum of practice situations. A combination of lecture and interactive case-based examples helps to establish a diagnostic framework that facilitates diagnostic accuracy and successful clinical outcomes.

**TDPT 544.3**  
**Evidence-based Differential Diagnosis & Screening in Physical Therapist Practice**  
1 credit  
(Course taught in conjunction with P 544.)

**TDPT 571**  
**Professionalism in Physical Therapy**  
1 credit  
The elements of a doctoring profession include professionalism, or a systematic and integrated set of core values that through assessment, critical reflection, and change, guides the judgment, decisions, behaviors, and attitudes of the physical therapist, in relation to patients/clients, other professionals, the public, and the profession. The core values adopted by the profession of physical therapy will be explored in this course, including the value of professional duty, the commitment to meeting one's obligations to provide effective care to individual patients/clients, to serve the profession, and to positively influence the health of society. Strategies for developing
increased understanding and demonstration of behaviors that illustrate the core values will be developed.

## Entry-level Doctorate Programs

### Doctor of Physical Therapy

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PT 500</td>
<td>Physical Therapy and Professionalism</td>
<td>3 credits</td>
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<td>An overview of the healthcare delivery system and of the professional roles of practicing physical therapists is presented. Students evaluate the interdisciplinary roles of medical and rehabilitation co-professionals and extenders, including, among others, medical doctors, nurses, physical, occupational and speech therapists, chiropractors, social workers, and physical therapist assistants. The history and development of modern-day physical therapy in the United States is examined in depth and includes the study of the collaborative nature of twenty first century healthcare practice. (Lecture 3)</td>
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<tr>
<td>PT 501</td>
<td>Foundational Sciences 1: Human Anatomy</td>
<td>5 credits</td>
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<td>The study of human anatomical structures as they relate to movement and the physiological demands of activity and exercise. A regional approach to the study of structures is aided by specimens, models, and videotapes. The course is projected to have a strong interactive, online component. (Lecture 5)</td>
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<tr>
<td>PT 504</td>
<td>Intervention 1: Physical Therapy Procedures</td>
<td>3 credits</td>
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<td>The first in a series of clinical skill courses; this introductory course focuses on basic principles and the development of psychomotor skills related to palpation, infection control, vital signs, clinical emergencies, body mechanics, positioning and draping, therapeutic massage, basic wheelchair prescription, transfers, bed mobility, and gait training of patients and clients. In addition, it introduces the student to the American Physical Therapy Association’s Guide approach to physical therapy practice and documentation. (Lecture 2/Lab 2)</td>
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<tr>
<td>PT 505</td>
<td>Critical Inquiry 1: Introduction to Research Methods</td>
<td>2 credits</td>
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<td>This course will present an introduction to general research principles and research ethics. The student will be introduced to the following topics in the research process: question formulation, principles of measurement, basic research design and methodological features, issues of reliability and validity, and fundamentals of conducting a literature review. This course will also serve as an introduction to evidence-based practice. Quantitative article critiques will be conducted in class and outside of class. This course will provide the student with the necessary background to formulate a hypothesis-driven, research prospectus. (Lecture 2)</td>
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<tr>
<td>PT 507</td>
<td>Physical Therapy Evaluation</td>
<td>2 credits</td>
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<td>This course will cover the elements of patient/client management with a focus on components of an examination and the development of the evaluation/diagnosis/ prognosis process. Laboratory sessions emphasize examination skills with refinement of psychomotor skills learned during the first semester. The evaluative process will utilize the International Classification of Functioning and Disability (ICF) as the primary process for making a diagnosis and developing the prognosis/ plan of care. The course also includes: introduction to documentation, history taking, examination tests and measures, outcome tools, and outcome assessments. (Lecture 1/Lab 2)</td>
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<td>Course Code</td>
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<tr>
<td>PT 511</td>
<td>Foundational Sciences 2: Kinesiology/Pathomechanics 1</td>
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<td>[This course will examine the study of human movement including selected anatomical, structural, and functional properties of human connective tissues, muscular tissues, nervous tissues, and skeletal structures. Emphasis will be placed on mechanical, neuroregulatory, and muscular influences upon normal and pathological motion. (Lecture 3/Lab 2)]</td>
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<tr>
<td>PT 514</td>
<td>Intervention 2: Physical Agents</td>
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<td>[The second in the intervention series, this course focuses on the theory and physiological effects of selected physical agents/modalities, including indications and contraindications relevant to specific conditions. Biophysical Technologies include heat, cold, electrical current, light, sound, and other electromagnetic spectrum modalities, as well as intermittent compression and traction. In addition, the American Physical Therapy Association’s Guide will be reviewed relative to physical therapy modality practice. (Lecture 1/Lab 2)]</td>
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<tr>
<td>PT 515</td>
<td>Critical Inquiry 2: Biostatistics</td>
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<td>[The purpose of this course is to introduce the student to biostatistics, the science of evaluating information in a biological setting. This course will cover such topics as simple descriptive statistics, basic probability concepts, probability distributions (normal &amp; binomial), sampling distributions, interval estimation, confidence intervals, hypothesis tests, and one and two-sample t-tests. (Lecture 2)]</td>
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<tr>
<td>PT 521</td>
<td>Foundational Sciences 3: Physiology/Histology</td>
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<td>[A clinical approach to physiological systems most relevant to the practice of physical therapy. Content relates to the normal and abnormal muscle and nerve physiological function, growth and repair of bone and soft tissue, cardiopulmonary system functions, nutrition and digestion, endocrine regulation of metabolism, homeostasis and kidney function. Content includes the microscopic and submicroscopic structure of mammalian tissue. The course is projected to have a strong interactive, online component. (Lecture 5)]</td>
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<tr>
<td>PT 524</td>
<td>Intervention 3: Therapeutic Exercise</td>
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<td>[The third course in the intervention series, this course is designed to provide students with an overview of basic principles related to exercise, including acute and chronic physiologic adaptation to aerobic and anaerobic exercise. The impact various disease states have on exercise capacity will also be explored. In addition, the application of therapeutic exercise prescription and medical documentation will be emphasized as related to pathologic conditions commonly seen in physical therapy practice. (Lecture 1/Lab 2)]</td>
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<tr>
<td>PT 531</td>
<td>Foundational Sciences 4: Kinesiology/Pathomechanics 2</td>
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<td>[This course is a continuation of Kinesiology/Pathomechanics 1, and includes the study of human movement, including selected anatomical, structural, and functional properties of human connective tissues, muscular tissues, nervous tissues, and skeletal structures. Emphasis will be placed on mechanical, neuroregulatory, and muscular influences upon normal and pathological motion. (Lecture 3/Lab 2)]</td>
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