UNIVERSITY COURSE CATALOG

2020

Rocky Mountain University of Health Professions is accredited by the Northwest Commission on Colleges and Universities (NWCCU; 8060 165th Avenue NE Suite 100, Redmond, WA 98052-3981), an institutional accrediting body recognized by the Secretary of the U.S. Department of Education.

The Doctor of Physical Therapy (DPT) program is accredited by the Commission on Accreditation in Physical Therapy Education (1111 North Fairfax Street, Alexandria, VA, 22314; phone: 703-706-3245; email: accreditation@apta.org).

The Doctor of Nursing Practice program and post-graduate APRN certificate program at Rocky Mountain University of Health Professions is accredited by the Commission on Collegiate Nursing Education, 655 K Street, NW, Suite 750, Washington, DC 20001; 202-887-6791, http://www.ccneaccreditation.org.

The Accreditation Review Committee on Education for the Physician Assistant (ARC-PA) has granted Accreditation-Continued status to the Rocky Mountain University of Health Professions Physician Assistant Program sponsored by Rocky Mountain University of Health Professions. Accreditation-Continued is an accreditation status granted when a currently accredited program is in compliance with the ARC-PA Standards. Accreditation remains in effect until the program closes or withdraws from the accreditation process or until accreditation is withdrawn for failure to comply with the Standards. The approximate date for the next validation review of the program by the ARC-PA will be March 2029. The review date is contingent upon continued compliance with the Accreditation Standards and ARC-PA policy. Address: 12000 Findley Road, Suite 150, Johns Creek, GA, 30097, email: arc-pa@arc-pa.org; Website: http://www.arc-pa.org/.

The Master of Science in Speech-Language Pathology program at Rocky Mountain University of Health Professions is a Candidate for Accreditation by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association (2200 Research Boulevard #310, Rockville, MD 20850, 800-498-2017). Candidacy is “pre-accreditation” status with the CAA, awarded to developing or emerging programs for a maximum period of five years. Award of candidacy allows the program to matriculate students into the program as it continues to document compliance with accreditation standards for the duration of the candidacy accreditation cycle.

RMUoHP reserves the right to change, without notice, any statement in this publication concerning, but not limited to, rules, policies, tuition, fees, faculty, curricula, and courses. This document is not a contract or an offer of a contract.
## Course Designators

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Course Codes and Descriptions

ACP 710  Lifestyle Medicine (3 credits)
This course explores the principles and practices of Lifestyle Medicine, with particular focus on the integration of Lifestyle Medicine into PA practice. An in-depth exploration of Lifestyle Medicine occurs, centering around the use of evidence-based lifestyle therapeutic approaches, such as predominantly whole food plant-based diet, exercise, sleep, tobacco cessation and alcohol moderation, stress management, emotional resilience, and other non-drug modalities. Discussion includes the utilization of Lifestyle Medicine to prevent, treat, and even reverse lifestyle-related chronic disease.

ACP 720  Patient Safety in Clinical Practice (3 credits)
This course provides an introduction to the science of safety and how it relates to problems with patient safety in the healthcare setting. Discussion includes the role of both individuals and the healthcare system in improving patient safety and reducing medical errors. The course reviews institutional responses to adverse events, including the topics of medical malpractice and risk management. The course emphasizes the importance of teamwork and good communication. Students learn models for improving safety in hospitals and other healthcare settings.

ACP 730  Population Health Safety (3 credits)
This course explores the definition of Population Health and how principles of population health integrate into clinical practice. Topics discussed include attributes and components of the population health paradigm, health promotion, elimination of health disparities, behavior change, continuity of care, information technology, decision making support, and the ethical dimension of population health. The business value of better health from a population health approach is also discussed, with some discussion of the role of health advocacy and assistance programs.

ACP 790  Clinical Practicum I (3 credits)
During this course, students will design and propose a clinical practicum that they feel will help them obtain additional exposure to and mastery of aspects of clinical practice that are not usually considered within the scope of general PA practice. During this semester, students are expected to find a qualified clinical preceptor (such as a collaborating physician or consulting specialist) who can precept them as they learn and master the advanced skill and knowledge. The student is expected to create a plan of learning and assessment with which the preceptor is agreeable. This plan is then proposed to DMSc faculty and approval of the practicum is accomplished by the end of the course.

ACP 795  Clinical Practicum II (3 credits)
During this semester, students carry out and execute the practicum developed and approved during Clinical Practicum 1. Students collaborate with their selected preceptor
and DMSc faculty as they accomplish the learning and assessment plan for their advanced skill and knowledge development. Through execution of the practicum, students apply specialized medical knowledge and increase their clinical capabilities to develop an area of clinical expertise. Prior to the end of the semester, students submit a standardized and comprehensive report on the execution and completion of this practicum.

**AG 716 Neurodegenerative Disease: Addressing Participation in Occupation**

This course will require students to examine current and emerging best practices for addressing participation in occupation for an older adult experiencing a neurodegenerative disease process. This course requires students to explore the role of occupational therapy on promoting participation in occupation for the aging population. Neurological diseases covered within this course include Alzheimer’s disease, Parkinson’s disease, and polyneuropathies. Students will engage in critical reasoning within forum discussions, analyzing intervention strategies, and development of a client-based case study.

**AG 726 Examining Occupational Therapy’s Role in Productive Aging**

This course offers students the opportunity to explore and critically analyze evidence associated with current and emerging areas of occupational therapy practice addressing the occupational performance needs of older adults. This course will analyze the current evidence-based interventions related to falls prevention, home safety, and environmental modifications to support aging-in-place. During this course, students will have the opportunity to develop a critically appraised paper and a client-based case study.

**AG 738 Application of Evidence for the Provision of Care for Persons with Dementia**

This new course will provide the opportunity for students to examine issues and evidence related caring for persons with dementia including non-pharmacologic intervention approaches, theoretical frameworks, environmental modification, caregiver education and their application in different clinical settings. Students will engage in clinical reasoning to understand and evaluate the complexities of addressing the need to promote participation and to optimize quality of life for persons with dementia. Students will utilize evidence-based practice guidelines (such as those developed by the American Occupational Therapy Association) to develop a client-based case study.

**ASP 710 ASP I: Project Development & Proposal**

During the first half of the semester, students are guided through the project development and proposal process. The latter half of the course is for students to revise and submit a proposal for their project. Approval of the project is accomplished prior to completion of this course. Students are advised to develop a proposal that is a comprehensive and in-depth study of a highly relevant issue encountered as a PA in the clinical, academic, or administrative setting. The expectation is that this project will be accomplished over multiple semesters.
ASP 720  ASP II: Literature Review  (3 credits)
In this course, the approved applied scholarly project is initiated and principles of scientific inquiry will guide the investigation. Students will be searching and gathering available, recent literature and composing several aspects of their comprehensive and in-depth study of a highly relevant issue encountered as a PA in the clinical, academic, or administrative setting.

ASP 730  ASP III: Dissemination  (3 credits)
In this course, students continue the investigation of the literature and composition of the final aspects of the comprehensive and in-depth study of a highly relevant issue encountered as a PA in the clinical, academic, or administrative setting. Students compile their final written product suitable for publication. The final product is compiled from segments of the proposal and project, comprising an extensive, in-depth review of the literature as it pertains to the selected issue. Students will then create an abbreviated version of the project following the submission guidelines of an appropriate peer-reviewed journal. Additionally, students will create a poster presentation that will be submitted for presentation at an appropriate professional conference of the student’s choice.

ASP 735  ASP Extension Course  (1 credit)
This optional 1-credit course is an extension of the applied scholarly project and may be used by a student who has not completed the full ASP by the end of ASP III. During this course, students continue to work with program faculty to complete all necessary components of the project.

AST 716  Assistive Technology Taxonomy & Evaluation  (3 credits)
This course requires students to explore the role of occupational therapists in assistive technology in both the educational and medical profession. Theoretical frameworks are reviewed to guide the application of assistive technology for children and adults with disabilities across various environmental contexts in addition to exploration of specialized clinical competencies. Students will review assistive technology taxonomy and theoretical framework that will guide the assistive technology assessment process. Strategies for assessment include identifying area of need, evaluating consumer skills and personal preferences, assessing environmental factors, and selecting technology systems.

AST 726  Assistive Technology Intervention & Environment Modifications  (3 credits)
This course requires students to explore the role of occupational therapists in assistive technology interventions and environmental modifications across various environmental contexts. Focus will be on analyzing assistive technology products/devices and features matched to the needs and personal preferences of clients and evidence-based research outcomes. Specific assistive technology areas to be discussed include technology for learning disabilities, computer access, cognitive aids, augmentative and alternative communication devices, sensory aides, electronic aides to daily living, and environmental modifications.
AST 736  Assistive Technology Implementation & Outcome Studies (3 credits)
This course requires students to synthesize information from the assistive technology assessment and tool features matched to the clients’ needs to develop an implementation strategy for successful assistive technology use. Focus will be on development and implementation of an assistive technology plan and coordination of care across environmental contexts, identifying measurable outcomes for progress, training clients and care team, follow-up and documentation. Students will analyze outcome studies on assistive technology effectiveness and incorporate evidence-based research into assistive technology practice.

AT 617  Evidence-based Advanced Therapeutic Interventions (3 credits)
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 618  Preventative Measures (3 credits)
This course will expose students to contemporary topics in athletic training clinical practice such as, mild brain injury, environmental illnesses and musculoskeletal injury. Students will examine and synthesize current research on these topics and present evidence-based preventative measures in order to curb their incidence.

AT 631  Motor Control and Movement Analysis (3 credits)
Discussion and analysis of scientific principles related to the mechanical understanding of motor control and the human body in motion. Review of related literature and research in motor learning and control. The focus of this course will be on qualitative analysis of motor assessment as related to musculoskeletal assessment and physiotherapy interventions.

AT 640  Connective Tissue and Injury Repair: An Evidence Based Approach (3 credits)
This course provides an evidence based approach to connective tissue injury including degenerative processes, healing, and rehabilitation implications. Understanding of the relationships among connective tissues such as bone, ligaments, cartilage, capsule, tendon and muscle on a micro and macro level will be emphasized. Sports injuries, issues of aging, and rehabilitation principles in special populations will also be included. These principles will be applied to treatment procedure choices in rehabilitation and preventative training.

AT 652  Extensive Therapeutic Exercise (3 credits)
This course will explore the current best evidence related to the continuum of athlete care associated with rehabilitation and return to play decision-making. Evidence-based injury rehabilitation will be instructed through a system of screening, testing, and assessment, as well as a progressive continuum of fundamental movements. The system will serve to guide corrective exercise intervention strategies to restore optimal...
movement patterns. Students will be exposed to injury prediction/prevention research and gain clinical skills in performance of the Functional Movement Screen, Y Balance Test along with discussing a neurodevelopmental model for corrective exercise progressions. 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. Students will work together to develop return to sport models that build on the basics but also focus on movement constructs that will minimize future injury risk.

**AT 700 Athletic Training Seminar**  
(3 credits)  
The seminar course will help students acclimate, familiarize, and become knowledgeable around their intended dissertation topic. Students will engage in literature review and on-going discussions to facilitate knowledge and understanding of their specific content area as it relates to their dissertation.

**ATH 700 Evidence-Based Principles in Clinical Practice**  
(3 credits)  
This course prepares the healthcare professional with the knowledge, skills and abilities necessary to review and critically appraise research. Additionally, focus is on the concepts of evidence-based practice with emphasis on forming answerable questions, effective literature search strategies, and interpretation/clinical application of results. Students acquire advanced knowledge and skills in interpreting medical literature to make informed clinical decisions.

**ATH 710 Preventative Practices**  
(2 credits)  
This course is focused on the care of the physically active person with chronic disease including asthma, diabetes, sickle cell anemia and other comorbidities. Students will be exposed to analysis of contemporary topics in athletic training clinical practice such as mild brain, injury, environmental illness and musculoskeletal injuries analyzing best preventative practices. Care plans will be evaluated and protocols will be created. Technological advances in injury prevention measures such as clothing, concussion equipment, protective devices and disease triggers are evaluated. This course is delivered totally online.

**ATH 720 Orthopedic Applications & Procedures**  
(3 credits)  
The use of a joint immobilization is indicated for a wide variety of orthopedic injuries that include fractures, sprains, and post-operative care. This course emphasizes casting and splinting techniques, assessment and treatment of casting complications, application of specialty casts, and interventions used during immobilization to address movement dysfunctions. In addition, proper fracture and joint dislocation reduction/relocation techniques are addressed. This is a hybrid course, where didactics must be completed before the onsite immersion session.

**ATH 720L Orthopedic Applications & Procedures Lab**  
(1 credit)  
Onsite applications include assessment, preparation of a patient for orthopedic dysfunction care. Various fractures will be assessed and prepared for appropriate care. The selection, fabrication and removal of orthopedic casts and splints, as well as the skills associated with providing patient instructions and home care. Joint dislocations
are evaluated and treated with appropriate orthopedic techniques. Simulated patient encounters are included.

**ATH 730   Emergency Procedures & Care**  
(3 credits)  
This course is designed to provide an intensive study of emergency care skills in the area of ambulatory medicine. This comprehensive course provides the learner exposure to urgent and emergent medical procedures in catastrophic settings. Contemporary medical emergencies include chemical and biological exposure and mass casualty. Students have opportunities to participate in learning labs focusing on catastrophic wound care, skin closures, advanced cardiovascular support and administering intravenous fluids/medications. This is a hybrid course, where didactics must be completed before or in concert with the onsite immersion session.

**ATH 730L   Emergency Procedures & Care Lab**  
(1 credit)  
The onsite immersion prepares the student to respond to catastrophic events with advance medical procedures to treat chemical and biological exposures. Advanced wound care and cardiovascular procedures is applied to simulated learning.

**ATH 740   Biomedical Testing & Imaging**  
(2 credits)  
This course is designed to develop a functional understanding of the appropriate uses and interpretations of clinical diagnostic testing commonly used to address musculoskeletal injuries and illnesses. Discussion of blood analysis, CT, MRI, X-Ray, and Diagnostic Ultrasound is stressed along with interpretation of results. Anatomical structures and sectional anatomy are emphasized as well as joint and tissue injection. This course is delivered totally online.

**ATH 750   Integrative Medicine**  
(2 credits)  
This course prepares the healthcare professional with the knowledge and abilities to understand pathophysiology on the brain gut axis and its implications on overall health. The interpretation of metabolic panels and the role it plays in integrative health and the applications of functional medicine is highlighted. Nutrition, diet and supplements are a primary focus to gain an integral understanding of integrative medicine.

**ATH 760   Patient Client Education**  
(2 credits)  
This course is designed to establish and enhance the healthcare provider’s knowledge, skills and abilities regarding emotional intelligence. Students are exposed to topics such as, but not limited to, generational learning/information styles, educational principles, conflict resolution, and patient-clinician ethics. Emphasis will be on essential professional skills and use of various patient education technologies. Contemporary health care standards for patient and client education are explored to include all stakeholders involved with the health and wellbeing of the patient or client.

**ATH 770   Contemporary Issues in Clinical Practice**  
(2 credits)  
This course reveals the multicultural approach to medicine by investigating various cultural healing aspects and beliefs in medicine and medical procedures. Inclusion of various cultural groups are explored including those with physical and mental disabilities. A medical service project enhances the didactics of this course.
ATH 780  Behavioral Mental Health  (2 credits)
This course promotes the understanding of mental health as it pertains to the active individual. A focus on identifying various mental health disorder, recognition of signs of various disorders and the development of an appropriate referral plan is emphasized. An understanding of substance abuse and other pharmacological agents is included.

CC 507.2  Critical Inquiry 1: Quantitative Issues in Published Research  (1 credit)
This course involves the study of data analysis, statistics, and results reported in scientific literature for the physical therapist. Basic and advanced topics in statistics are reviewed with an emphasis on interpreting data analysis methods and results commonly reported by authors in physical therapy literature. Students will interpret statistics reported in journal articles, and make judgments about the appropriateness of reported methods, interpretations, and conclusions based on research designs, data, and assumptions underlying applied statistical methods. Examples from current physical therapy literature will be cited throughout the course to illustrate concepts and improve the students' abilities 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 527  Critical Inquiry 2: Evidence-based Practice  (2 credits)
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 focuses 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 prepares 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 are 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 626.3  Neonatal Case Report: Directed Independent Study  (1 credit)
This independent study involves analyzing a neonatal case, writing a neonatal case report abstract, and designing a scientific poster. This project occurs in the last phase of the Neonatology Fellowship. The case report or fellowship project is presented by power point lecture to the fellowship mentor team. A poster layout of the case description and analysis will be submitted using a template provided by Rocky Mountain University of Health Professions with inclusion of the logo from the Neonatology Fellowship clinical site.
CC 637  Case Report Methodology  (1 credit)
This course will progress the clinical practitioner’s knowledge of advanced case report/series methodology, as both a consumer and producer of evidence. In this web-based course, emphases will be placed on effective use of summary techniques and ranking of reports in the evidence hierarchy. The goal is to prepare students to efficiently report their own clinical work in conjunction with TDPT 508 (Directed Independent Study) and P529.2 (Pediatric Science Capstone).

CC 811A  Scholarly Project III  (4 credits)
This course is the third of a 3-course series designed to implement and evaluate of the DNP scholarly project. This culmination of this course is the successful defense of the scholarly project. Semesters of Doctoral Residency Credit for Scholarly Project (CC 811B, CC 811C, etc.- one course per semester) as needed

DNP 630  Advanced Practice Roles  (3 credits)
This course will provide emphasis on the exploration of the advanced practice role as it relates to quality and delivery of health care in rapidly changing health care systems. Historical as well as current issues, which affect professional development including regulation of practice and professional responsibilities, will be included.

DNP 632  Evidence Based Practice I  (3 credits)
This course is the first of a three part series that includes an introduction to the concepts of evidence based practice as 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.

DNP 634  Theoretical Foundations & Scholarly Inquiry  (3 credits)
This course explores the theoretical foundations of practice, the conceptual models to implementation research, and strategies to implement evidence based approaches to practice. Learning focuses on the application of theory-directed design, implementation, and evaluation while applying evidence to transform healthcare systems.

DNP 636  Informatics in Healthcare  (3 credits)
This course is designed as a survey course for the advanced practice nurse 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 and web-based patient and professional education are among the topics explored.

DNP 640  Statistics in Health Sciences  (3 credits)
This course will provide an understanding of qualitative and quantitative statistics. The course will emphasize the conceptual application of statistics as it relates to health care however some discussion of the mathematical underpinning necessary for
understanding will be included. Relevant topics to provide the student with skills to read and interpret medical literature will be included.

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<th>Course Title</th>
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<td>DNP 644</td>
<td>Organizational Behavior and Management</td>
<td>(3 credits)</td>
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<td>This course will focus on various organizations within health care. Student will explore theories and concepts of organization, leadership and business to develop and support initiatives to improve health care at the practice and systems level.</td>
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<tr>
<td>DNP 646</td>
<td>Health Care Policy/Law/Ethics</td>
<td>(3 credits)</td>
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<td>The course will explore the principal ways US healthcare is structured and how law and policy affects the healthcare environment. With an understanding of law and policy the course highlights the development of effective strategies for managing the ethical dilemmas inherent in organizing evidence-based healthcare delivery at the individual, organizational and systems level.</td>
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<tr>
<td>DNP 650</td>
<td>Epidemiology and Population Health</td>
<td>(3 credits)</td>
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<td>This course will provide an introduction to epidemiology that will prepare the advanced practice nurse with an understanding of epidemiological concepts as they relate to health and healthcare. Concepts that pertain to clinical practice and population health as well as implications for screening, prevention and disease control will be included.</td>
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<tr>
<td>DNP 652</td>
<td>Health Care Economics</td>
<td>(3 credits)</td>
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<td>The course will explore the principal ways US healthcare is structured and financed at the national, state, and local levels. 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.</td>
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<tr>
<td>DNP 654</td>
<td>Advanced Health Assessment</td>
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<td>This course will focus on advanced physical assessment, communication and diagnostic reasoning skills for the advanced practice nurse to care for individuals and families across the lifespan. Skills obtained in this course will be used to analyze health and alterations in health for individuals and families and prepare the student for independent practice.</td>
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<td>DNP 656</td>
<td>Advanced Pathophysiology</td>
<td>(3 credits)</td>
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<td>This course is a system-focused pathophysiology course that includes advanced concepts of functioning as it relates the family nurse practitioner’s ability to manage illness across the lifespan. Special attention will be given to advanced concepts that correlate with clinical decisions related to diagnosis and therapeutic management. Genetic, environmental and lifestyle factors will also be included as they relate to the epidemiology of disease.</td>
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<td>DNP 660</td>
<td>Quality Improvement in Healthcare</td>
<td>(3 credits)</td>
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<td>This course will focus on theory, methods and tools necessary for advanced practice leaders to facilitate quality improvement in healthcare. Analysis of economic, social and political issues that affect quality in today’s healthcare setting will be included.</td>
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DNP 662  Leadership  
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 664  Advanced Pharmacology I  
This course is designed to provide the comprehensive pharmacokinetic and pharmacodynamic understanding required by advanced practice nurses to safely and appropriately utilize pharmacotherapeutics. Students acquire the knowledge needed for the promotion of health and treatment of illnesses encountered in various settings, diverse populations, and across the lifespan.

DNP 667  Teaching in Nursing  
This course will provide and explore teaching across the nursing profession at the doctoral level. This course will cover three populations: as APRNs, how one teaches students (particularly graduate students), how one teaches patients, how one teaches peers (particularly to influence changes in practice).

DNP 668  Specialty Focus I (Adult I)  
Students will apply knowledge of advanced health assessment, pathophysiology, pharmacotherapeutics, and non-pharmacotherapeutics in recognition and management of acute and chronic primary care conditions most often seen in the adult (25 to 65 years of age) population. Genetic, age, gender, and cultural influences will be considered as differential diagnosis and treatment plans are proposed. Laboratory findings, diagnostic studies and primary care procedures associated with the common conditions will be explored.

DNP 700  Specialty Focus II (Adult II)  
Students will continue to apply knowledge of advanced health assessment, pathophysiology, pharmacotherapeutics, and non-pharmacotherapeutics in recognition and management of acute and chronic primary care conditions most often seen in women’s and men’s health and in the older adult (65 plus years of age) population. Genetic, age, gender, and cultural influences will be considered as differential diagnosis and treatment plans are proposed. Laboratory findings, diagnostic studies and primary care procedures will be integrated. The physical and social aspects of aging, as well as palliative and end-of-life care, will be explored.

DNP 702  Advanced Pharmacology II  
This course builds on the synthesis of knowledge gained from Advanced Pharmacology I. Students focus on prescribing and monitoring pharmaceutical and alternative therapeutic agents in select conditions commonly encountered by the advanced practice nurse. This course integrates evidence-based prescribing, as well as ethical and legal aspects of pharmacotherapeutics.
DNP 704   Evidence Based Practice II  (3 credits)
This course is the second course in a series of evidenced based practice where the student will evaluate and apply the concepts of evidence based practice as 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.

DNP 708   Health Promotion and Preventive Care  (3 credits)
This course will direct the student in the examination of published guidelines designed to integrate and institute evidence based clinical prevention and health services for individuals, aggregates, and populations across the life span

DNP 720   Specialty Focus III (Pediatrics)  (5 credits)
Students will continue to apply knowledge of advanced health assessment, pathophysiology, pharmacotherapeutics, and non-pharmacotherapeutics in recognition and management of acute and chronic primary care conditions most often seen in the pediatric (0 to 24 years of age) population. Genetic, age, gender, and cultural influences will be considered as differential diagnosis and treatment plans are proposed. Laboratory findings, diagnostic studies and primary care procedures associated with the common conditions will be explored. Developmental milestones, variations in laboratory findings and prescriptive approaches will be explored. Strategies and interventions in education, family support, and facilitated family communication will be included.

DNP 722   Evidence Based Practice III  (3 credits)
This course is third in a series of evidenced based concepts where with student will integrate evidence-based practice as 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.

DNP 730   Scholarly Project I  (3 credits)
This course is the first of a 2-course series designed to assist students in the development of an evidence-based capstone project. The scholarly project is the culminating learning experience in the DNP program. Learning focuses on project planning including emphasis on project management, gathering evidence, developing vision/goals/outcomes for the project, and applying theories/frameworks to structure the overall process.

DNP 732   Clinical Internship I  (4 credits)
This course is the first of a two series clinical practicum that prepares students for advanced nursing practice as family nurse practitioners. Students will further their skill development in the primary care of individuals and families across the lifespan with acute and chronic conditions.

DNP 740   Scholarly Project II  (3 credits)
This course is the second of a 3 course series designed to integrate all previous course work and experiences into the development of evidence-based practice (EBP) project. 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 the project participants.

**DNP 742  Clinical Internship II  (5 credits)**
This course is the second of a two series clinical practicum that prepares students for advanced nursing practice as family nurse practitioners. Students will further their skill development in the primary care of individuals and families across the lifespan with acute and chronic conditions. Students are guided through the application processes for recognition and certification as a family nurse practitioner.

**EDU 718  Introduction to Occupational Therapy Educational Settings  (3 credits)**
This course will allow the student to explore the foundations of adult learning theory establishing an understanding of adult learning theory and the domains of learning. Students will relate this knowledge to the Scholarship of Teaching and Learning as outlined by AOTA and Boyer’s Scholarship of Teaching. This course requires students to critically examine theoretical approaches in teaching and learning in academic and clinical settings. Students will foster within themselves their own teaching philosophy, the awareness of learning styles, and an understanding of the importance of life-long learning.

**EDU 726  The Foundations of Instructional Design  (3 credits)**
This course will allow the student to gain the necessary skills required to use backward design in lesson planning, course development, developing assessment tools, writing learning and course objectives reflective of Bloom’s / Fink’s Taxonomy. The course will culminate with the student demonstrating a working knowledge of creating a learner centered syllabus and lesson plan.

**EDU 736  Instructional Methods for Occupational Therapy Education  (3 credits)**
This course will focus on increasing the student’s awareness of the latest trends in education including the concept of the flipped classroom, the use of technology in teaching and learning, learning management systems and program design (hybrid, distant, and traditional classrooms). The student will explore various teaching methods (lectures, small group discussions and group task-oriented work, student led learning, guided inquiry, seminar, etc.) and managing student concerns to allow for facilitating continued learning.

**HLA 620  Healthcare Leadership  (3 credits)**
Concepts of leadership related to current healthcare organizations are examined. Specific concepts including communications, public relations, team building, negotiation, and conflict resolution are explored. Strategic aspects such as vision, viewpoint and admission included. Managing uncertainty is discussed in relation to healthcare
organizations. Contemporary leadership challenges, communication strategies and crisis communication are explored. Leadership functions and decision-making are analyzed.

**HLA 670 Organizational Behavior & Management**  
*in Healthcare*  
(3 credits)  
This course supports knowledge of the theories of organizations, the use of leadership, management processes, and organizational structures and outcomes. Specific topics include governance, strategic management and marketing, human resources management, recruiting, training, process improvement, management theory, and employee wellbeing. This course is designed for future managers and leaders of healthcare organizations and those who expect to have extensive involvement with each from the perspective buyers, insurers, or policymakers. The course provides students with knowledge about how the best healthcare provider organizations deliver high quality, cost-effective healthcare, how the response to their environment, and how they reach and implement decisions about future activities.

**HLA 700 Healthcare Legal & Ethical Issues**  
(3 credits)  
This course offers an exploration of the legal and ethical issues and dilemmas in the delivery of healthcare. The principles and practical application of laws and regulations affecting operational decisions of healthcare providers, health plans, and third-party payers are discussed. Also addressed are social, moral, and ethical issues encountered in the balance of patient interests, needs and rights.

**HLA 680 Strategic Change Management for Healthcare Organizations**  
(3 credits)  
This course offers student opportunities to investigate and integrate change management practices to strategically position healthcare organizations for the future. Organization strategic position will be discussed with application to relevant theoretical models, and necessary change management practices resulting in development of organizational adaptability.

**HLA 700 Healthcare Legal & Ethical Issues**  
(3 credits)  
This course offers an exploration of the legal and ethical issues and dilemmas in the delivery of healthcare. The principles and practical application of laws and regulations affecting operational decisions of healthcare providers, health plans, and third-party payers are discussed. Social, moral, and ethical issues encountered in the balance of patient interests, needs and rights are also addressed.

**HLA 720 Healthcare Systems**  
(3 credits)  
This course examines health policy and economic issues as each relates to healthcare delivery systems. The complex arrangements and interactions among governmental, private not-for-profit and for-profit systems are explored within the context including economic, legal, sociopolitical, and public policy perspectives.
HLA 740  Healthcare Delivery  (3 credits)
This course will train healthcare leaders to implement or teach principles of delivering better healthcare at lower costs through improving clinical and non-clinical processes. This course will introduce methods and tools for conducting quality improvement projects. Also discussed will be methods of health services research, teams and teamwork, outcome measurement, and medical informatics. A key learning experience of this course will be developing and implementing a quality improvement project.

HLA 790  Administrative Practicum I  (3 credits)
During this course, students will design and propose an administrative practicum that they feel will help them obtain additional exposure to and mastery of principles of healthcare administration in the hospital or clinical setting. During this semester, students are expected to find a qualified administrative mentor (such as a hospital or clinic administrator) who can mentor them as they learn and apply administrative skills and knowledge. The student is expected to create and develop a plan for an administrative project with which the mentor is agreeable. This plan is then proposed to DMSc faculty and approval of the practicum is accomplished by the end of the course.

HLA 795  Administrative Practicum II  (3 credits)
During this semester, students carry out and execute the practicum developed and approved during Administrative Practicum 1. Students collaborate with their selected mentor and DMSc faculty as they accomplish the administrative project. Through execution of the practicum, students apply specialized leadership and administrative knowledge to increase their capabilities and develop as a leader in healthcare. Prior to the end of the semester, students submit a standardized and comprehensive report on the execution and completion of this practicum.

HP 610  Advanced Sport Performance Technology  (3 credits)
This course will focus on technologies that have been developed to reach human interests or goals related to a particular sport. It will focus on the types, and appropriate selection and use of technology by which sport performance coaches attempt to improve training and competitive surroundings and enhance overall athletic performance. The course will provide knowledge and application of using specialized equipment and the latest modern technologies to perform tasks more efficiently, such as equipment, athletic sports gear (clothing and footwear), advanced computer stimulations and motion capture.

HP 702  Applied Sports Science  (3 credits)
This course reviews the various disciplines that play important roles in sports performance enhancement including biomechanics, motor learning, exercise physiology, and sport psychology. In addition, sociological aspects will be discussed regarding applications of science to different populations including athletes and tactical personnel. Applied projects will assist the student in taking foundational knowledge and applying it to real world sports scenarios to solve problems, enhance training, reduce injuries, or improve performance. Lecture, discussion, and presentation by student.
HP 704  Methods and Programming in Strength & Conditioning  (3 credits)
This course will expose students to advanced methods in various venues of strength and conditioning. Current research and practice are examined for advanced training strategies in use at different levels of competition. Students will examine different methods currently in use in the field and discussed in the literature on selected topics and demonstrate appropriate implementation of advanced training methods. Additionally, this course will refine the students’ ability to construct an advanced training program designed to enhance performance in specific ways. The student will demonstrate the ability to critically analyze and alter a training program.

HP 706  Sports Nutrition for Human Performance  (3 credits)
This course will discuss, in detail, scientific and practical applications of nutrition for sports. Integrated discussions spanning exercise physiology and nutrition on topics that relate to aerobic and anaerobic performance, health, weight gain, weight loss and recovery will be covered. Class assignments will broaden the student’s knowledge, writing ability and competence at both retrieving and summarizing scientifically-based information. (Required for HSP Concentration)

HP 710  Applications of Exercise Science in Tactical Fitness and Performance  (3 credits)
This course will introduce students to the various methods and strategies for improving performance in military, law enforcement, and fire department venues. Topics such as injury prevention and tactical job preparation will be discussed with students completing applied projects in selected tactical operations. Tactical fitness research and literature will serve as the content for developing professionals capable of supporting the tactical field with evidence-based practice.

HP 714  Recovery and Regeneration  (3 credits)
This course will examine the science and history behind various advanced methods of recovery and regeneration techniques for the human body. The evidence will be reviewed in numerous topics including nutritional strategies, sleep habits, hydrotherapies, cryotherapy, sports supplementation, nutrient timing, and massage therapy. Through an evidence led approach, students will demonstrate the ability to evaluate and identify various types of fatigue, prescribe the appropriate regeneration modality, and periodize a recovery program based upon the principles learned in HP 704 (Methods and Programming in Strength and Conditioning).

HPE 620  Clinical Education Experiential Design & Application for Healthcare Professions  (3 credits)
This course addresses the many issues germane to experiential or clinical education in the healthcare professions by reviewing the design, implementation and assessment of clinical experience in the healthcare fields. Among the topics to be covered include supervisory policies and practices, communication, feedback, developing clinical expertise and reasoning skills, professionalism, student learning documentation and mapping, preceptor/supervisor training and development, and the role of entrust able professional activities, competencies and milestones in student clinician development.
HPE 670  Learning Assessment & Evaluation  (3 credits)
This course examines a variety of assessment models and techniques used to evaluate student classroom performance, student clinical performance, instructor performance and educational programs. Students will design and execute assessment plans, interpret assessment data and develop continuous improvement plans.

HPE 700  Design & Implementation of Inter-Professional Education  (3 credits)
This class will investigate the available literatures on IPE from around the world and across healthcare professions: what works, what doesn’t, what to expect, how to go about tackling the IPE challenge, and what to expect in the way of challenges. Students will acquire a best evidence available and comprehensive appreciation for the many challenges, limitations, opportunities and future of IPE in their home professional field.

HPE 710  Advanced Methods in Cyber-Andragogy  (3 credits)
This course provides an opportunity to develop advanced online teaching and course design skills. This course is a continuation of instructional technology and will focus on enhanced online teaching/learning tools, resources, concepts, and challenges. Emphasis will be on designing active learning experiences for online learners. Students will revise and upgrade preexisting online courses, investigate relevant online learning topics and issues, and develop strategies for assessing online courses and student learning.

HPE 718  Climate of Higher Education  (3 credits)
This course will focus on presenting and analyzing contemporary social, political and economic issues surrounding higher education and the effects these issues have on healthcare education programs. Current challenges in healthcare education programs will also be explored. Students will learn how to successfully navigate the role of a faculty member in the higher education environment. A brief history of higher education will be included.

HPE 740  Learning Theory & Design  (3 credits)
This course incorporates a learner centered approach to course development and instructional delivery based on the best evidence of how people learn. Students will demonstrate both traditional and innovative instructional techniques and strategies for teaching in didactic settings based upon the evidence-base of best teaching practices.

HPE 752  Curriculum Design for Healthcare Professions  (3 credits)
Students will learn how effective health professions curricula must integrate the basic and clinical sciences, connect didactic to experiential learning, be competency-based and time-variable, include andragogic underpinnings and approaches of delivery, and create meaningful program outcomes and assessment opportunities that verify quality and excellence. In addition timely issues such as the curricular incorporation of clinical experiences/education, the sociocultural aspects of healthcare, and pertinent accreditation issues and constraints for healthcare professions will be addressed.
HPE 760  Instructional Technology: Design, Theory, and Application  (3 credits)
This course explores the history and theory of instructional technology used in educational settings. Focus is on identifying, discussing and comparing various instructional technology utilized in the design and delivery of online, blended, and traditional classroom learning environments. Best practices of current instructional technologies utilized in higher education classrooms are systematically designed, created, shared, and reviewed.

HPE 790  Education Practicum I  (3 credits)
During this course, students will design and propose an education-based practicum that they feel will help them obtain additional exposure to and mastery of principles of healthcare education in the university setting. During this semester, students are expected to find a qualified educational mentor, a professor at an graduate-level PA program, who can mentor them as they learn and apply higher education skills and knowledge. The student is expected to create and develop a plan for an education development project with which the mentor is agreeable. This plan is then proposed to DMSc faculty and approval of the practicum is accomplished by the end of the course.

HPE 795  Education Practicum II  (3 credits)
During this semester, students carry out and execute the practicum developed and approved during Education Practicum 1. Students collaborate with their selected mentor and DMSc faculty as they accomplish the education-based project. Through execution of the practicum, students apply education knowledge and skill to increase their capabilities and develop as an educator in healthcare. Prior to the end of the semester, students submit a standardized and comprehensive report on the execution and completion of this practicum.

HPE 718  Climate of Higher Education  (3 credits)
This course will focus on presenting and analyzing contemporary social, political and economic issues surrounding higher education and the effects these issues have on healthcare education programs. Current challenges in healthcare education programs will also be explored. Students will learn how to successfully navigate the role of a faculty member in the higher education environment. A brief history of higher education will be included.

HS 504  Research Methods for Evidence-Based Practice  (3 credits)
This course will prepare healthcare professionals with the knowledge, skills and abilities necessary to implement evidence-based practice in their careers. This course will focus on the concepts of evidence-based practice with emphasis on forming answerable questions and effective literature search strategies.

HS 506  Data and Decision-Making  (3 credits)
This course will focus on the use and application of statistics commonly found in the field of exercise science. Topical areas include but are not limited to determining appropriate statistical tests to perform, interpreting results and determining appropriate follow-up tests as needed. Emphasis is on design of experiments and appropriate statistical test usage, and interpretation of results.
HS 507 Evidence-Based Practice (3 credits)
This course is designed to prepare health care professionals with the knowledge, skills and abilities necessary to make independent judgments about the validity, results, and application 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.

HS 509 Integrated Biomechanics (3 credits)
In this course, students will develop an understanding of the concepts of movement integration and assessment to possess a general appreciation of biomechanical relationships. The body as an interconnected unit will serve as the foundational framework for learning and application. Students will recognize and apply treatment restoration to enhance movement quality for various client/patient populations. This course will emphasize the need for continual study and sourcing of various biomechanical information.

HS 520 Injury Prevention/Recognition (3 credits)
This course will provide the healthcare professional with advanced health assessment skills including the comprehensive history, assessment of signs and symptoms, and pathologic changes. The course will integrate the latest assessment tests and measures and laboratory tests used to design prevention as well as treatment plans. This course will include analyses of and assessment procedures for common athletic orthopedic conditions of the upper and lower extremity. It will emphasize the appropriate teaching strategies for the instruction of assessment procedures.

HS 602 Applications of Education Practice (3 credits)
This course will explore best practices of the application of educational instruction and delivery for individuals working in a variety of employment settings with diverse populations including clients, patients, students and community learners. This course will include topics associated with generational learning, learning styles, learning design for groups and individuals along with various styles of delivery.

HS 630 Motor Control & Movement Analysis (3 credits)
Discussion and analysis of scientific principles related to the mechanical understanding of motor control and the human body in motion. Review of related literature and research in motor learning and control. The focus of this course will be on qualitative analysis of motor assessment as related to musculoskeletal assessment and corrective exercise interventions.

HS 684 Health Science Capstone Project (3 credits)
Students may elect to complete a practicum and capstone project or research intensive thesis project under the guidance of the Graduate Program Director and research committee. The project will be specifically related to the student's professional and academic goals.
HS 686A    Health Science Thesis (3 credits)
Students who have chosen the thesis option will be required on-site to complete a defense of their thesis project.

HS 686B    Health Science Thesis (3 credits)
Students who have chosen the thesis option will be required on-site to complete a defense of their thesis project.

HS 710    Evidence-based Practice (3 credits)
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.

HS 712    Research Methods: A Quantitative Approach (3 credits)
This course provides 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. The class format will include lecture, small group discussion, and practice.

HS 714    Scientific/Professional Writing (1 credit)
This pass/fail 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.

HS 720    Survey of Qualitative Research (3 credits)
This course introduces the student to qualitative research methods and their applications to problems and phenomena in healthcare. Emphasis is placed on the appropriate use and differences of qualitative methods, their philosophical underpinnings, and application to clinical issues.

HS 722    Biostatistics 1 (3 credits)
The purpose of this course is to introduce the student to biostatistics, the science of evaluating information in a biological setting. Such topics as simple descriptive
statistics, basic probability concepts, probability distributions (normal & binomial), sampling distributions, and an introduction to t-distributions will be covered.

**HS 727 Survey Mixed Methods Research** (3 credits)
This course will familiarize students with theory and application of survey research design and methods with integration of a mixed methods approach. Students will learn the principles and practices of conducting survey research including: accounting for and reducing sources of error, designing appropriate sampling strategies, assessing the reliability and validity of self-constructed questionnaires and interview protocols, administering surveys through various means and analyzing and reporting results of survey research. How to integrate qualitative inquiry with survey research to develop and conduct a mixed method study including writing results will be emphasized.

**HS 730 Epidemiologic Methods** (3 credits)
This course will introduce the student to important epidemiological methodology/concepts commonly used in evidence-based practice/medicine. The course will focus on the common observational designs, and common measures of disease frequency, risk association, and validity of diagnostic tests. The use and construction of receiver operating curves will be discussed. The course will also include an introduction into logistic regression and survival analysis methods in how they apply to disease outcomes/disorders. Students will conduct and apply basic epidemiological concepts using statistical software and learn how to design and develop. The student will be provided with information to aid in data collection and management.

**HS 732 Biostatistics 2** (3 credits)
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.

**HS 734 Qualitative Research 2** (3 credits)
This course is the second in a two-course sequence on qualitative research methods that extends and elaborates on the topics covered in HS 720. Major approaches used in conducting qualitative research and the application of these methods to problems and phenomena in healthcare will be examined. The emphasis of the course is on the collection, management, analysis, and interpretation of qualitative data. Exploration and application of topics such as sampling, interviewing and observation techniques, data analysis methods, and reporting of qualitative research will be addressed. Evaluation and critique of research studies utilizing qualitative methods will also be examined.

**HS 740 Teaching and Learning Theory** (3 credits)
This course incorporates a learner centered approach to course development and instructional delivery based on the best evidence of how people learn. Students will demonstrate both traditional and innovative instructional techniques and strategies for teaching in didactic and clinical settings based upon the evidence-base of best teaching practices.
HS 742  Biostatistics III  (3 credits)
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 related non-parametric methods.

HS 751  Case Series Single Subject Design  (3 credits)
This course will seek an in-depth exploration and practice regarding the mechanics, design and construction of case series and single subject research designs in a healthcare environment. Students will develop and submit a single subject/case series research design related to individual dissertation topics or to relevant clinical questions.

HS 762  Literature Review, Analysis, and Synthesis  (3 credits)
This course provides the student with skill sets to conduct a literature search, analysis and synthesis on a selected research topic complimentary of their dissertation. Research will be systematically selected based upon quality of design/methods, relevance to proposed dissertation/study instruments and linkage to research hypothesis/questions. Submission of a synthesis paper with literature summary table will be included.

HS 800  Dissertation Prep I  (2 credits)
The conduct of scientific inquiry requires careful planning and forethought to assure 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/research question-driven dissertation prospectus that can be used to convince funding agencies and/or doctoral committees to support the study. Emphasis will be placed on developing a clear background, scientific/clinical rationale, and hypothesis/research question along with the start of a methods section and strategies to form a dissertation committee. In addition, this course will provide key information about the responsible conduct of research, the informed consent process, and the Institutional Review Board process so the student will be able to design a safe and ethical environment for their volunteer subjects.

HS 810  Dissertation Prep II  (1 credit)
This course is a continuation of HS800 Dissertation Prep I where students will finalize their written prospectus. Students will continue securing dissertation committee commitments and be prepared to defend a mock prospectus defense via presentation while on campus. Students prepare for the Institutional Review Board process by completing the CITI Human Subjects Research course, becoming familiar with the online submission platform, and drafting informed consent documents.

HS 833A  Qualifying Exam Preparation  (3 credits)
This course is designed to assist students in the preparation for qualifying exams on core competency material and to complete the exam. The course will prepare students to develop a study strategy and plan for the exam as well as participate in discussions concerning material that comprise the exam questions.
HS 833B  Proposal Writing  
This course is designed to assist students in their initial dissertation phase of their academic program. Emphasis will be on the socialization process of the dissertation including forming a committee, overcoming challenges and obstacles, time management and development of the dissertation prospectus/proposal.

HS 877A  Grant Writing  
This course is designed to assist students in the dissertation phase of their academic program relative to seeking and acquiring grants. Emphasis will be on the basic grant process, searching for grant opportunities and developing a grant proposal.

HS 877B  Writing for Publication  
In this course students will learn how to transform research into publishable articles, drafting, editing and revising work with guidance and feedback of instructor and peer review. Technical writing and organizational skills will be reviewed. Common guidelines for publication will be discussed. Students with enough data from dissertations will start developing manuscripts for publication.

HT 718  Seminar for Upper Extremity Specialists  
This course will require students to examine current and emerging best practices for addressing participation in occupation for individuals with musculoskeletal and neurological disorders involving the upper quadrant. This course requires students to explore the role of occupational/hand therapy on transitioning from a reductionist model to promoting meaningful activity and participation. Students will adopt language from the ICF to incorporate treatment of body structures and function to promote activities and participation while considering individual and societal perspectives of participation. Students will share research and clinical expertise on hand therapy related interventions including orthosis management for tendon injury, nerve injury, fractures, degenerative diseases and movement disorders. Students will engage in critical reasoning within forum discussions, analyzing intervention strategies, electronic presentations and development of a client-based case study. Students will be indoctrinated in EBP and utilization of technology in hand therapy.

HT 726  Evidence-Based Concepts of Radiographic Imaging  
This course will provide fundamental principles of radiographic imaging procedures while challenging the student to address occupational-based strategies for clinical decision-making. Students will broaden their knowledge and acquire skills to recognize common normal and abnormal radiographic findings of the upper quadrant. The student will develop skills to approach imaging studies from a scientific and occupation-based prospective. Students will integrate the diagnostic utility of imaging procedures related to activities and participation.

HT 736  Advanced Concepts in Hand Therapy Evidence-Based Practice  
This course will provide the opportunity for students to examine client-centered care practices through utilization of the best evidence for interventions used in upper
quadrant rehabilitation clinics. Students will appraise the literature pertaining to upper quadrant interventions and outcome assessment tools to assist in determining the best practices in hand therapy. Emphasis will be placed on in-depth examination of interventions strategies, and diagnosis and prognosis of specific neuromuscular and musculoskeletal disorders of the upper quadrant. This didactic course will promote student interaction through class forums, blogs, and social networks. Critical reasoning will be reinforced through the development of electronic presentations, scholarly papers, and the application of theoretical concepts in support of Vision 2025.

**LD 718 Essentials of Practice Management & Administration (3 credits)**

This course will allow the student to explore the foundations associated with designing, promoting, and leading a healthcare organization. The course will offer instruction regarding the following principles: financial planning; budgeting, marketing/branding; strategic planning, space designing, and core principles associated with developing and or leading a healthcare organization. The student will utilize evidence in establishing business planning principles for owning or operating a healthcare organization. Students will engage in critical reasoning within forum discussions and through the development of an executive business summary.

**LD 726 Best-Practice for Organizational Development (3 credits)**

This course will allow students to gain the necessary skills required in the daily operations of leading a healthcare organization. Advanced knowledge occurs in developing a strategic plan along with an evidenced-based business planning. The student will review evidenced associated with human resource theory, strategic planning, development theory, conflict resolution, corporate goal setting and staff development. The course will address barriers associated with integrating evidence into practice, as a leader of a healthcare organization plays an integral part in promoting evidenced-based practice within all healthcare settings. Additionally, the course offers foundational knowledge regarding innovative leadership and entrepreneurship, allowing the student to develop knowledge regarding alternative health care delivery models.

**LD 736 Productivity and Profitability for Participation (3 credits)**

This course integrates concepts and skills of administration and practice management with core tenets associated with occupational therapy practice patterns. This course focuses on participation in occupation, client-centered care, customer satisfaction and outcome based delivery models. This course aims to equip students with confidence and tools to validate that operating a clinic or business in this way will promote productivity, profitability, client outcomes, and clinician satisfaction. Students synthesize and apply knowledge associated with evidence-based practice, occupation-based practice, client centeredness, documentation, and outcome measurement to establish strategies to lead within the healthcare arena. Students will demonstrate the ability to identify significant factors that affect business sustainability through the creation of an evidence-based final project.
MS 610  **Evidence-Based Practice**  (3 credits)
Serving as a prelude to the applied scholarly project, this course focuses on concepts of evidence-based practice. Specifically, the course covers the foundational principles of research design, epidemiology, biostatistics, and searching the medical literature. Additional focus for the course includes critical evaluation of the literature and synthesis of EBP principles into realistic practice settings.

MS 614  **Professional & Scientific Writing**  (3 credits)
This course reviews PubMed, Index Medicus, other search methodologies, American Medical Association Manual of Style editorial format, the composition of a scientific/professional manuscript, the style of scientific and professional writing, its construction and formats. Students will complete a literature review and a case report during this course, with emphasis placed on professional and scientific writing techniques, as well as proper formatting and citation.

N 720  **Neuroscience Systems**  (3 credits)
This course will focus on the structure and function of the central nervous system. It is designed to provide a survey of the functional components of the nervous system and an understanding of the functional brain at a systems level; specifically integrate aspects of neuroanatomy with physiology to allow association of brain areas with the various functions. Items to be discussed include the areas and mechanisms of the brain that process sensory and motor information. The brain's reaction to sensory input as well as the ability of the brain to adapt and change as a result of input will be highlighted. In addition, various diseases/injuries will be explored to provide an understanding of normal and pathophysiological brain function.

N 722  **Clinical Neuroscience and Contemporary Motor Models**  (3 credits)
This course will serve to review, update, and synthesize evidence from the neurosciences as a foundation for clinical practice, as well as explore the fundamental principles, limitations, and clinical implications of the theories of motor control and motor learning influencing clinical practice. It will include the incorporation of constructs from motor learning and motor control theories into therapeutic intervention for individuals with a variety of movement problems resulting from neurological dysfunctions. Trends in models of service delivery: medical, educational, community, and social models, will be analyzed and approached from a modern evidence-based perspective.

N 724  **Neurological Screenings and Outcomes Assessment**  (3 credits)
This course will explore the selection, utilization, and interpretation of screening and outcome assessments within the current healthcare environment including standardized tools for assessment of health status based on the validity, reliability and responsiveness of the instrument, and how the assessments relate to the International Classification of Functioning, Disability, and Health (ICF) model.
N 727  Advanced Neurologic Practice-Part I  (3 credits)
This course will focus on comprehensive management of the individual with stroke, traumatic brain injury, brain tumor, and neurodegenerative disorders. The pathophysiology, pharmacology, and imaging will be used to design evidence-based interventions, grounded in the International Classification of Functioning, Disability, and Health (ICF) framework, that foster advanced clinical decision making for prediction, prevention, plasticity, and participation in physical therapy practice.

N 729  Advanced Neurologic Practice-Part II  (3 credits)
This course will focus on the comprehensive management of the individual with spinal cord injury, demyelinating and vestibular disorders. The pathophysiology, pharmacology, and imaging will be used to design evidence-based interventions, grounded in the International Classification of Functioning, Disability, and Health (ICF) framework, that foster advanced clinical decision making for prediction, prevention, plasticity, and participation in physical therapy practice.

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OTD 710  Evidence-based Practice  (3 credits)
This course prepares occupational therapists with 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 and process of evidence-based practice with emphasis on forming answerable clinical questions, utilizing effective literature search strategies, and incorporating methods to organize the literature. Students will learn how to dissect a research study and interpret the data, statistics and results reported in scientific literature as it relates to occupational therapy practice. Based on didactic information, presentation of case scenarios, and clinical experience, students will be required to formulate clinical questions, rapidly search medical and health-related databases, critically appraise evidence, and describe application of evidence in a clinical context.

OTD 712  Evidence Analysis and Design  (3 credits)
This course provides an overview of research design from the perspective of the hierarchy of levels of evidence. Students will examine common designs of studies from lowest to highest levels of evidence in terms of purpose of study, question formulation, methodological features and significance of findings for application in practice. The evaluative approach to appraising research will prepare students to judge evidence on: 1) reliability and validity of diagnostic tests, standardized assessments and outcome measures 2) effectiveness of clinical interventions for a client; population or organization; 3) natural history of health-related conditions; and 4) risk of harm from select preventative and therapeutic interventions. Course content will foster students' abilities to analyze the relationship between research question and study design in order to deepen an understanding of how evidence informs practice and to speculate upon design of clinically meaningful research.
OTD 714  Foundations of Practice Scholarship in Occupational Therapy  (2 credits)
A practice-scholar embeds research in their everyday practice and contributes independently or collaboratively to building the evidence base for occupational therapy practice and occupational therapy education. This course launches the student’s transition to the role of practice scholar and leader in health and human service. Students explore literature underlying the paradigm of scholarship, analyze leading models of behavioral and system change, review literature guiding occupational therapy, and engage in self-reflection to evaluate being and becoming practice/clinical scholars in occupational therapy. Students participate in practical exercises associated with scholarly writing, professional development analysis, strategic planning and the production of works of scholarship. Students receive an introduction to the Capstone Project process in the class.

OTD 716  Healthcare Advocacy: Policy, Legal & Ethical Context  (2 credits)
This course raises awareness of important policy, legal and ethical issues affecting the domain and process of occupational therapy. The course examines evidence supporting ways to advocate for others as leaders in healthcare and to self-advocate to function within an ethical decision-making framework. Emphasis is placed upon a) gaining awareness of efforts to empower clients [i.e., person, population or organization] to seek and obtain resources to fully participate in occupations, b) exploring methods to influence policy change and c) examining strategies to identify, manage and reduce risk of legal and professional ethical problems.

OTD 720  Analysis & Evidence of Participation  (3 credits)
This course requires self-reflection upon and examination of the traditions, current trends and emerging areas of practice within occupational therapy literature, research and practice. Students engage in critical analysis of evidence and clinical reasoning in the context of a model of practice, frames of reference, health care initiatives and official documents to formulate rationales for the place of occupational therapy in health and human service. The contribution of qualitative inquiry to knowledge translation, evidence-based practice and participation as the process and outcome of occupational therapy is explored more deeply. Particular attention is paid to formulation of a qualitative inquiry statement using focus group methodology as a means of needs assessment and/or program evaluation.

OTD 724  Educating in Occupational Therapy  (3 credits)
This course provides students with foundational knowledge of best evidence associated with teaching and learning in clinical and academic settings. Knowledge will be applied in modules to offer students opportunities to explore how best to teach clients [i.e., person, population, or organization], professional peers and students in academic or clinical settings. Overall content aims to expose students to a range of educational delivery mechanisms and to basics of policies and procedures per educational setting. Course will require creation of an evidence-based learning module and assessment of learning for a targeted audience.
OTD 730  Emerging Roles for OT in Primary Care & Health Promotion  (4 credits)
Building on prior courses reflecting evidence-based practice and occupational therapy principles and practice, this course emphasizes principles of program development and evaluation. Course exposes students to research associated with emerging roles for occupational therapists in health promotion, prevention and primary care. Students are challenged to conceptualize how occupational therapy can meet growing societal needs in the context of population health issues and initiatives, an occupational justice framework and models of behavior change. Mechanisms of program development such as feasibility study, proposal preparation, grant writing and business planning will be reviewed along with topics associated with reimbursement, basic survey design and program evaluation. Students will choose a program approach and target population; appraise the state of the evidence in selected realm and generate an evidence-based executive summary of a program that promotes the profession of occupational therapy as contributing to meeting the designated population’s occupational needs.

OTD 732  Advanced Practice Scholarship in Occupational Therapy  (2 credits)
This course launches student towards the initiation of the Capstone Project. Constructs examined in this course build upon foundational course and challenge students to demonstrate commitment to being/becoming practice-scholars. Through continued scholarly discourse, self-reflection, and examination of knowledge translation/transfer as a consequence of evidence-based practice, students formulate the proposal for the Capstone Project. Students generate a working draft for presentation on campus to receive peer and instructor feedback to further refine Capstone Project proposal. Instructor reviews parameters for: options for project, expected rigor, deliverables, impact of project on healthcare and occupational therapy and the process to optimize successful completion. Instruction on professional presentation and dissemination of subsequent works of scholarship are provided. Students conclude course with approval of project proposal by the Graduate Program Director or Designee.

OTD 734  Use, Design and Implementation of Evidence-Based Practice Guidelines  (2 credits)
This course focuses on the role of evidence-based and/or clinical guidelines as a means of applying best-available evidence at the point of care. Course content is structured in terms of use of existing evidence-based guideline for case-based care planning, creation of a clinically relevant guideline or best evidence statement and implementation of evidence-based guidelines or processes into a department or system. Students apply steps of evidence-based practice, contemplate literature on overcoming barriers to evidence-based practice, and critically reflect upon stories of exemplars of evidence-based practice. Course aims to arm students with mindset and tools to exert change in practice and to justify occupational therapy’s contribution to the public’s health.

OTD 740  Leadership as an Occupation  (2 credits)
This course examines current research and practices of leadership. Students examine the influence of emerging technologies, shifting accountabilities between providers and consumers, health care reform and occupational therapy’s Vision 2025 in relation to evolving leadership principles and characteristics. Evidence-based tools are analyzed for their contribution to developing leadership as a meaningful activity. Issues of
change, creativity and innovation, inter-professional collaboration, leadership delivery models, self-mastery, professional integrity, credibility and other leadership-related concepts are themes that underpin the course. Special emphasis is placed upon self-exploration of intentions for leading in health and human service beyond degree conferral.

OTD 742  Capstone Project  
(3 credits)
Students complete a Capstone Project reflecting the synthesis and application of evidence-based practice and occupational therapy principles learned within the RMUoHP Post-Professional OTD curriculum. The Capstone Project demonstrates achievement of GPD-approved*, student-generated learning outcomes and a product of practice/clinical scholarship that informs occupational therapy practice. The quality of the Capstone Project shall meet high standards for professional presentation and illustrate application of best available evidence and integration of curricular content. The course requires students to engage with peers online for constructive feedback and accountability. Students submit and present a summation of the Capstone Project in the form of a “virtual” professional poster according to parameters outlined during class to peers and instructor by end of course. Students conclude course with final reflections upon the learning process.

P 510  Pediatric Pharmacology & Imaging  
(1 credit)
In this course, pharmacodynamics and pharmacokinetics of commonly prescribed medications and over-the-counter drugs are addressed for children receiving physical or occupational therapy. Potential drug complications of adverse effects and interactions are reviewed. An overview of brain and musculoskeletal imaging procedures occurs with emphasis on the neonatal brain and common musculoskeletal pathology in children.

P 528  Pediatric Science Capstone Seminar  
(1 credit)
In this seminar course, students have the opportunity to present the topic and outline of proposed pediatric science capstone projects for review and feedback. Program development principles and evidence-based practice approaches to project development are explored.

P 529.2  Pediatric Science Capstone  
(4 credits)
The pediatric capstone involves an individualized experience to expand knowledge, competency, and leadership in pediatrics. The project is negotiated with the instructor and can be achieved in a variety of settings (clinical, education, administration). The capstone project may target professional development from a range of experiences including program development, teaching, leadership/management, scientific writing, and subspecialty training with a program development component. An alternative approach is to build on the previous directed independent study project from semester 2. A soft-bound technical report of the project is submitted.
P 544 Pediatric Differential Diagnosis & Medical Screening for Practitioner Referral
(1 credit)
This course is designed to enhance the skill level of physical 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 564 Evidence-Based Analysis of Interventions in Pediatric Physical Therapy Practice
(1 credit)
This course empowers students to develop focused clinical questions pertinent to their individual clinical practices and use 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 confidence in selecting the most effective evidence-based interventions for pediatric patients.

P 600.2 Seminar on High Risk Neonates & Parents
(1 credit)
An overview is provided of the unique culture of the neonatal intensive care unit (NICU), common medical conditions of developmentally at-risk neonates, structural and physiological vulnerabilities of preterm infants, and theoretical frameworks for neonatal therapy practice. Description and analysis of neonatal therapy examination and intervention methods, risk management, and outpatient follow-up priorities are reviewed. Critical pathways for neonatal practice and competency assessment guidelines are outlined, and the emerging evidence base for neonatal therapy practice is included as well as subspecialty clinical competencies for advanced practice in neonatal care.

P 608 Assistive Technology for Children with Motor, Behavioral, & Communication Impairment
(3 credits)
Theoretical frameworks and evidence are analyzed to guide the application of technology for children with disabilities in early intervention, school, and home environments. Strategies are examined for evaluating, designing, and selecting technology systems to facilitate participation across life activities. Practitioner competencies are reviewed and research gaps are analyzed with emphasis on outcome studies of assistive technology effects on practice. Specific assistive technologies options for review are technologies for learning, computer access, cognitive aids and communication, electronic aids for daily living, and environmental modification.

P 702 Leadership in Pediatric Physical Therapy
(1 credit)
Models and perspectives are analyzed for administrating, leading, and consulting in pediatric therapy settings with strategies for managing challenging work setting dynamics included. Self-reflection is conducted on personal leadership style and
approaches within the framework of Goleman’s Emotional Intelligence model and Hagberg’s Real Power model.

P 703 Seminar on Children & Youth in Early Interventions & Education Environments  
This course includes 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.

P 704 Pediatric Pathological & Genetic Conditions: Etiology, Pathophysiology, Clinical Course, & Pediatric Therapy Examinations & Intervention  
Overview and evidence-based practice analyses are presented on etiology, pathophysiology, clinical course, and key pediatric therapy management issues. Family dynamics and stressors are addressed in the context of trauma-informed care and grief processes.

P 707 Oral-motor & Feeding Impairments in Infants & Children With Medical Fragility  
Examination and management of feeding and swallowing disorders are explored for infants and children with respiratory, neuromuscular, and oral structural impairments. Evidence refuting or supporting practice approaches are analyzed, and related practice guidelines examined. Current research gaps and clinical questions are identified for future dissertation projects.

P 707.4 Topics in Oral-motor & Feeding Impairments in Infants with Medical Fragility  
Examination and management of feeding and swallowing disorders in infants and children with respiratory, neuromuscular or structural deficits are reviewed with discussion of related evidence. A range of interventions is explored including transitions to oral feeding from supplemental feeding lines. Cases are analyzed according to available evidence, multiple body system considerations, and clinical decision-making perspectives.

P 710 Pediatric Research Seminar  
Explore research team and/or lab setting: conduct site visit(s) to a research lab or research team and present post-site visit reflection and analysis; investigate feasibility of study settings and methods for infant or child participants; identify strategies for adapting research procedures for children (motivation, endurance, and safety); review options for study participant recruitment and consent; obtain designs of recruitment brochures and flyers; identify topic(s), potential settings, content experts, and methods for dissertation-related pilot study; attend research team meeting.
P 718 Adolescents & Adults with Cerebral Palsy: Lifespan Outcomes & Literature Analyses
Changes across the lifespan are examined in the musculoskeletal, cardiopulmonary, functional, vocational, social, self-esteem, and family status of adolescents and adults with cerebral palsy. Implications of this cascade of changes for pediatric therapy management are discussed with analysis of the literature on outcomes in adulthood.

P 719 Family Studies & Research Process (3 credits)
Multiple topics are analyzed on family system theories, theoretical frameworks of family development and functioning, extrinsic and intrinsic factors influencing family functioning, and ecological / transactional models of child development. Concepts of family assessment, family-centered care, culture, stress, and coping are included. A synthesis paper is submitted involving literature analysis and application to a pediatric therapy and family topic. Research questions, variables, and theoretical mapping are discussed.

P 721.3 Scientific Writing and Professional Presentations (1 credit)
An 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. Strategies for professional presentations (poster and platform), international presentations with an interpreter, and media interviews are reviewed.

P 723 Legal & Ethical Issues for Advanced Practice in Pediatric Physical Therapy
An overview of the American legal system is provided with focus on medical malpractice, negligence, informed consent, and HIPPA issues. Ethical considerations, risk management, and strategies for identifying and managing professional misconduct in the workplace are discussed. Documentation standards and expert witness-deposition procedures are reviewed. Each student presents a legal or ethical pediatric case exemplar from their pediatric practices.

P 724 Embryologic and Fetal Development: Implications for Neonatal Care
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 neonatal intensive care units.

P 735 Topics in Pediatric Gait: Seminar & Lab (1 credit)
This course focuses on pre-and-early ambulation in a population predisposed to rapid and dramatic changes: birth to three year old children. Typical and atypical preparation for and development of ambulation are examined in the infant and toddler. The effects of biomechanics, neuromuscular and sensory systems, orthotics, and tone management are integrated as participants learn to build intervention strategies to address ambulation early and effectively in infants and toddlers. Clinical application involves
children with diagnoses of cerebral palsy, developmental delay, prematurity, or Down Syndrome. Course material is presented using lecture, videos, and group problem solving. Participants practice techniques with each other during lab sessions.

P 740 Lifespan Participation from Infancy to Adulthood: Complex Integration of Mobility, Sensory Processing, & Communication
This course is centered on analyzing the process and outcome of participation in children to age 21 years. Components of sensory processing, mobility, and communication are explored in promoting or limiting participation in daily life. Case analyses and research evidence are used to examine effects and interaction of the following factors: pathomechanics, developmental kinesiology, sensory processing, respiration – communication, fatigue, pain, and resiliency.

P 750 Neuroscience in Pediatric Rehabilitation
Neuroanatomy and neurophysiology are reviewed with application to pediatric neurological conditions and neural control of human movement. An overview of key concepts in motor control, motor learning, and neural plasticity is included with emphasis on movement and sensory dysfunction in children with neuropathology.

P 755 Pediatric Research Independent Study
A directed independent study option is offered to support a focused component in pediatric studies or pediatric research process not directly addressed in other courses. The focus, objectives, and activities are individually designed between the student and pediatric science concentration area director. The independent study option is offered during two online semesters but can be taken only once.

PAS 501 Applied Human Anatomy
This course emphasizes the clinical application of human anatomy. Students learn to recognize normal anatomic structures and become familiar with common anatomic variations. This course covers topographical, radiological, and gross anatomy content pertinent to everyday primary care clinical practice. The cadaver laboratory offers hands-on-learning, facilitating abstraction of anatomical relationships and spatial orientation. Recognition of abnormal and pathologic findings is consistently stressed throughout the course, providing an applicable foundation for effective diagnostic evaluation and therapeutic intervention.

PAS 502 Biomedical Science
This course is an overview of physiologic and pathophysiologic processes influencing the human body. Part of the course emphasizes genetic, molecular, and cellular level mechanisms while other content focuses on disease manifestation at the organ and systems levels. Basic principles of cell biology, histology, embryology, immunology, and molecular genetics are covered. Included also is an introduction to general pathology, infectious processes, nutrition, and environmental effects on the human organism. Case studies assist students in applying relative principles in clinical situations, and initiate the process of understanding dysfunction and pathology in clinical settings. Recognition of alterations of normal function is highlighted throughout.
PAS 503  History and Physical Exam  (3 credits)
This course challenges students to develop the knowledge and skills necessary to competently elicit a comprehensive, as well as problem-specific, medical history. Students are taught principles of physical examination and develop foundational skills including inspection, auscultation, percussion, and palpation. A focus on normal exam findings is emphasized to provide students a solid foundation for recognition of abnormal findings in later courses and eventual practice. Recording and documentation of medical records is introduced and practiced. This course focuses on adult exam and documentation. Specific material for pediatric and geriatric examination is addressed in their respective courses.

PAS 504  Primary Care Fundamentals  (2 credits)
This course provides students with a strong foundation for practicing primary care clinical medicine. Providing holistic, relationship-centered patient care is emphasized. Clinical medicine topics covered include pervasive diseases encountered, diagnosed, and managed in the primary care setting, such as diabetes mellitus, hypertension, and lipid disorders. Common diagnostic and health maintenance laboratory studies are also explored, including but not limited to, complete blood count, basic metabolic panel, kidney function tests, liver function tests, lipid panels, and thyroid testing. Tailoring care to individual patients is discussed, particularly principles related to treating patients with chronic disease states, enabling students to subsequently consider disease processes of organ-systems in the context of patients with common underlying comorbidities.

PAS 505  Digital Literacy & Reflective Practice  (1 credit)
This course addresses the ever-changing use of technology in academic and healthcare settings. Students are empowered to become more effective and efficient learners and clinicians by grasping critical digital concepts and mastering several technologies. An emphasis on learning theory serves as a consistent thread for the duration of this course, with particular focus on how the latest technologies can support evidence-based educational approaches to maximizing learning in adults. Students discover how they can optimize patient care through reflective practice, high proficiency digital literacy, and dedication to evidence-based practice and lifelong-learning. Topics covered include but are not limited to: personal knowledge management, leveraging information architecture, and cloud-based data synchronization. Moreover, students are challenged via clinical case vignettes to apply learned skills, demonstrating proficiencies related to using point-of-care clinical information resources and problem-solving through collaborative networking.

PAS 506  Clinical Pharmacology Core  (3 credits)
This course serves as a primer for future courses geared toward specific disease states, challenging students to learn core pharmacologic concepts foundational for subsequent utilization of pharmacotherapeutics in patient-centered practice. Principles of pharmacokinetics and pharmacodynamics are presented. Other topics include drug nomenclature, drug classification schemas, drug interactions, adverse drug reactions, autonomic nervous system pharmacology, analgesics and pain management principles, and individualized approaches to pharmacologic management of disease. Content related to prescriptive powers and prescriptive writing requirements is also provided.
PAS 511  Professional Development I  (1 credit)
This course is the first in a series designed to integrate the principles of professionalism, ethics, profession-specific issues, and the business of medicine, with the practice of medicine. Students are instructed in academic and intellectual honesty and professional conduct in relation to academics and clinical practice. Specific focus areas include history of the physician assistant profession, professionalism, medical ethics, and working as part of a healthcare delivery team.

PAS 512  Professional Development II  (1 credit)
This course is the second in a series designed to integrate the principles of professionalism, ethics, profession-specific issues, and the business of medicine, with the practice of medicine. Emphasis of this course is on the role healthcare providers play in the areas of public health, preventive medicine, and health maintenance.

PAS 513  Professional Development III  (1 credits)
This course is the third in a series designed to integrate the principles of professionalism, ethics, profession-specific issues, and the business of medicine, with the practice of medicine. This course examines many of the legal and practice-based issues of healthcare including: electronic data management, coding, billing, reimbursement, rules and regulations, confidentiality, certification and licensure, and safety.

PAS 514  Professional Development IV  (1 credit)
This course is the fourth in a series designed to integrate the principles of professionalism, ethics, profession-specific issues, and the business of medicine, with the practice of medicine. This particular course evaluates health care disparities and provider sensitivity to cultural diversity, socioeconomic differences, and their impact on health and wellness. Complementary and alternative medical practice methods are also examined with particular attention given to integrative and preventive approaches.

PAS 515  Professional Development V  (1 credit)
This course is the fifth in a series designed to integrate the principles of professionalism, ethics, profession-specific issues, and the business of medicine, with the practice of medicine. This particular course occurs during the final didactic semester just prior to students engaging in the final two full-time supervised clinical practice experiences (SCPEs) semesters. The focus during this course is developing skills needed to become a lifelong learner through practice-based learning/self-improvement and developing awareness of health policy and current trends/issues. There is a continued emphasis on professionalism as it applies to clinical practice.

PAS 516  Professional Development VI  (1 credit)
This course is the sixth in a series designed to integrate the principles of professionalism, ethics, profession-specific issues, and the business of medicine, with the practice of medicine. This particular course covers the organizational and economic elements of systems-based practice. This course also focuses on cost-effective and efficient health care, case management, risk management, error prevention, patient safety, and quality improvement.
PAS 517  Professional Development VII  (1 credit)
This course is the seventh in a series designed to integrate the principles of professionalism, ethics, profession-specific issues, and the business of medicine, with the practice of medicine. The focus of this final course in the series is on the professional expectations and responsibilities facing new physician assistant graduates. Students continue to cultivate the skills necessary for future career development and growth. Topics include curriculum vitae/resume development, job searching, interviewing, employment contracts, credentialing, privileging, mentoring, leadership development, and sustaining the PA profession.

PAS 601  Behavioral Dynamics  (3 credits)
This foundational course explores the psychosocial aspects of medicine. Students develop interpersonal and communication skills necessary to effectively communicate with patients and other healthcare professionals. Treatments are discussed from a biopsychosocial perspective with reference to psychotherapies, psychopharmacology, and environmental intervention. Recognition and management of common psychiatric and psychosocial problems encountered in primary care are highlighted. Indications for referral and hospitalization are discussed. Topics covered include but not be limited to: anxiety disorders, mood disorders, psychosis, substance use disorders, personality disorders, eating disorders, and psychiatric emergencies and crises. Case-based learning and role-play is employed to provide enhanced understanding of applying evidence-based practices to individual patient needs and circumstances.

PAS 602  Hematology/Oncology  (2 credits)
This course is a clinical medicine (CM) modular course using an organ-systems approach to facilitate student learning in the study of hematology and oncology. Focus includes commonly encountered medical issues affecting hematopoiesis, hemostasis, and the lymphoid organs. Topics emphasized include clinical presentation, epidemiology, pathophysiology, patient assessment, diagnosis, pathology, therapeutic interventions, disease management, and clinical course of common disorders. This course also includes introductory oncology content, with a focus on the global clinical aspects of cancer screening, diagnosis, staging, and therapeutic intervention. Organ-specific cancers are primarily discussed in corresponding CM modular courses.

PAS 603  Endocrinology  (2 credits)
This course is a clinical medicine (CM) modular course using an organ-systems approach to facilitate student learning in the study of endocrinology. Commonly encountered medical problems primarily affecting metabolism and organs of the endocrine system are examined. Topics emphasized include clinical presentation, epidemiology, pathophysiology, patient assessment, diagnosis, pathology, therapeutic interventions, management, and clinical course of common diseases.

PAS 604  Infectious Disease  (2 credits)
This course is a clinical medicine (CM) modular course emphasizing global considerations related to approaching infectious disease. Content includes mechanisms of transmission and pathogenicity, methods of diagnosis, antimicrobial pharmacotherapy, common and systemic clinical presentations, and methods for
infection control and prevention. Common bacterial, viral, fungal, and parasitic pathogens are explored. Organ-specific and demographic predominant infectious diseases are primarily discussed in corresponding CM modular courses.

**PAS 605 Eyes, Ears, Nose, Throat (EENT)**
This course is a clinical medicine (CM) modular course using an organ-systems approach to facilitate student learning in the study of diseases and disorders of the eyes, ears, nose, and throat (EENT). Topics emphasized include clinical presentation, epidemiology, pathophysiology, patient assessment, diagnosis, pathology, therapeutic interventions, management, and clinical course of common diseases.

**PAS 606 Cardiovascular/EKG**
This course is a clinical medicine (CM) modular course using an organ-systems approach to facilitate student learning in the study of cardiovascular medicine. Commonly encountered medical problems primarily affecting the cardiovascular system are examined. The clinical presentation, epidemiology, pathophysiology, patient assessment, diagnosis, pathology, therapeutic interventions, management, and clinical course of these conditions are explored. During this course students learn fundamentals of interpreting electrocardiograms (EKG), including recognition of common abnormal EKG patterns and differentiation from normal and normal variant EKG tracings.

**PAS 607 Pulmonology**
This course is a clinical medicine (CM) modular course using an organ-systems approach to facilitate student learning in the study of pulmonology. Commonly encountered medical problems primarily affecting the pulmonary system are examined. The clinical presentation, epidemiology, pathophysiology, patient assessment, diagnosis, pathology, therapeutic interventions, management, and clinical course of these conditions are explored.

**PAS 608 Genitourinary**
This course is a clinical medicine (CM) modular course using an organ-systems approach to facilitate student learning in the study of the genitourinary system. Focus for this course includes examination of commonly encountered genitourinary issues. Topics emphasized include clinical presentation, epidemiology, pathophysiology, patient assessment, diagnosis, pathology, therapeutic interventions, disease management, and clinical course of common diseases.

**PAS 609 Gastroenterology**
This course is a clinical medicine (CM) modular course using an organ-systems approach to facilitate student learning in the study of gastroenterology. Commonly encountered medical problems primarily affecting the gastrointestinal system are examined. The clinical presentation, epidemiology, pathophysiology, patient assessment, diagnosis, pathology, therapeutic interventions, management, and clinical course of these conditions are explored.
PAS 610  Pediatrics  (3 credits)
This course examines important aspects of primary care pediatrics including assessment of the child patient, preventive health, and pediatric diseases and conditions. Specific issues of the newborn and older child are presented in such areas as perinatal care, child development & behavior, congenital & genetic disorders, pediatric infectious disease, pediatric respiratory issues, pediatric emergencies, injuries, and parenting. Pediatric pharmacotherapy are explored with emphasis on indications, contraindications, and medication dosing in relation to disease process type and patient demographics. The student also learns assessment techniques specific to the pediatric population.

PAS 611  Neurology  (2 credits)
This course is a clinical medicine (CM) modular course using an organ-systems approach to facilitate student learning in the study of neurology. Focus for this course includes examination of commonly encountered neurologic issues. Topics emphasized in this course include clinical presentation, epidemiology, pathophysiology, patient assessment, diagnosis, pathology, therapeutic interventions, disease management, and clinical course of common diseases.

PAS 613  Surgery  (1 credit)
This course focuses on basic surgical concepts related to primary care as well as surgical specialties. The intent is to familiarize students with surgical concepts, topics and technique. Students learn to recognize signs and symptoms that may require surgical intervention. This course also emphasizes risk management for preoperative patients, pre- and postoperative care, wound assessment, and wound management.

PAS 614  Geriatrics  (2 credits)
This course provides a foundation for addressing medical problems commonly seen in the aging and elderly population. Additional instruction on preventive medicine, health maintenance, mobility limitations and access to healthcare, therapeutic interventions, medication awareness, and quality of life issues are emphasized. Instruction related to death and dying is also provided.

PAS 615  Women’s Health  (2 credits)
This course addresses important aspects of women’s health with an emphasis on obstetrical, gynecologic, and preventive care. Content includes a thorough exploration of physiology, pathophysiology, disease states, management options, and screening guidelines for women’s health issues. Obstetrics focuses on the principles of prenatal, perinatal, and post-natal care. Complications arising in pregnancy and management of the more common emergent problems that occur in pregnancy are discussed.

PAS 616  Emergency Medicine  (3 credits)
This course provides fundamental instruction on the recognition and management of life-threatening patient presentations. Problem-based case studies and team-based activities are utilized extensively in this course. Team work, collaboration, cooperation, and valuing interdisciplinary contributions to managing patients is emphasized. BLS and ACLS certification is included as part of this course.
PAS 617  Dermatology  (2 credits)
This course is a clinical medicine (CM) modular course using an organ-systems approach to facilitate student learning in the study of dermatology. Focus revolves around commonly encountered dermatologic disorders. Topics emphasized in this course include clinical presentation, epidemiology, pathophysiology, patient assessment, diagnosis, pathology, therapeutic interventions, disease management, and clinical course of common diseases.

PAS 618  Orthopedics  (2 credits)
This course is a clinical medicine modular course using an organ-systems approach to facilitate learning in the study of orthopedic conditions, injuries, and disease processes. Focus for this course includes examination of commonly encountered musculoskeletal issues. Emphasis on proper examination and special exam tests for common orthopedic issues are discussed. Topics emphasized include clinical presentation, epidemiology, pathophysiology, patient assessment, diagnosis, pathology, therapeutic interventions, disease management, and clinical course of common diseases. Fundamental aspects of interpreting imaging studies such as x-rays, MRI, and CT scans are developed. Identification of common fractures, subluxations, and dislocations common in primary care are discussed.

PAS 619  Rheumatology  (1 credit)
This course is a clinical medicine modular course using an organ-systems approach to facilitate learning in the study of rheumatologic conditions and disease processes. Focus for this course includes examination of commonly encountered rheumatologic issues. Topics emphasized include clinical presentation, epidemiology, pathophysiology, patient assessment, diagnosis, pathology, therapeutic interventions, disease management, and clinical course of rheumatologic diseases. Fundamental aspects of interpreting imaging studies such as x-rays, MRI, and CT scans are developed.

PAS 690  Evidence-Based Practice 1  (1 credit)
Serving as a prelude to the Applied Clinical Reasoning courses, this course focuses on concepts of evidence-based practice. Specifically, the course covers the foundational principles of research design, epidemiology, biostatistics, and searching the medical literature.

PAS 692  Applied Clinical Reasoning: Acute Care  (3 credits)
This course is the second in a series designed to challenge students to develop clinical reasoning skills, think critically, enhance interpersonal and communication skills, apply evidence-based resources, and problem-solve as clinicians and as members of an interdisciplinary healthcare team. Students are challenged with simulated cases where they develop clinical skills evaluating standardized patients. Cases are acute care in nature and emphasis is placed on the following: developing differential diagnoses, developing assessments and plans, the medical chart, medical documentation, and informed consent. Students give oral case presentations and integrate aspects of preventive care and public health in the context of acute care.
PAS 693  Applied Clinical Reasoning: Longitudinal Care  (2 credits)
This course is the third in a series designed to challenge students to develop clinical reasoning skills, think critically, enhance interpersonal and communication skills, apply evidence-based resources, and problem-solve as clinicians and as members of an interdisciplinary healthcare team. Building upon patient care skills developed from the acute care focus, this course challenges students to evaluate and manage standardized patients in the context of longitudinal care. Key content areas include: establishing patients in the primary care setting, admission orders, inpatient management, progress notes, discharge summaries, rehabilitative care, palliative care and end-of-life issues, and utilization of an electronic healthcare record.

PAS 694  Applied Clinical Reasoning: Interprofessional Care  (2 credits)
This is the final applied clinical reasoning course in the series specifically designed to challenge students to develop clinical reasoning skills, think critically, enhance interpersonal and communication skills, apply evidence-based resources, and problem-solve as clinicians and as members of an interdisciplinary health care team. In this course, PA students develop professional collaborative relationships with students from other health professions programs. Case-based scenarios and standardized patient simulations are designed to facilitate a team approach to patient-centered care. Students are challenged to rely on the strengths of students from other disciplines to solve complex medical cases. Emphasis is also placed on further developing interpersonal and communication skills.

PAS 695  Evidence-Based Practice 2  (1 credit)
Service as a companion to the Applied Clinical Reasoning courses, this course focuses on concepts of evidence-based practice. Specifically, the course covers principles of biostatistics, critical evaluation of the literature, and synthesis of EBP principles into realistic practice settings.

PAS 700  Clinical Rotation Preparatory Seminar  (2 credits)
This course includes daily learning experiences for the first two weeks of the second summer semester and is designed to prepare students for their first full-time clinical rotations. Critical patient-care principles and concepts covered during the first three semesters are reviewed. New content focuses predominantly on the pragmatics of optimizing one’s learning opportunities during supervised clinical practice experiences (SCPEs). Topics include but are not limited to: self-care, electronic medical record access, interacting with and understanding the perspectives of preceptors, critical learner attributes of motivation, eagerness, professionalism, and work ethic, utilizing a learner-driven hypothesis and interrogative approach to developing preliminary assessments and plans supported with clinical science rationale, and refining oral case presentations.
Students also learn to perform male and female genitourinary examinations using professional models. Finally, this course houses content related to HIPPA, OSHA, understanding clinical and hospital hierarchy, as well as the logistics of participating in SCPEs including patient logging requirements, completion of preceptor evaluations, and
programmatic procedures related to housing, completing rotation specific assignments, and taking end-of-rotation examinations.

**PAS 701 Clinical Rotation (Family Medicine/Primary Care) (4 credits)**
The first supervised clinical practice experience (SCPEs) is intentionally designed to place students into the real world of full-time patient care while in the midst of their didactic studies. Students are immersed in the experience of modern medical practice as they evaluate patients and employ their evidence-based practice skills to access, interpret, and apply high quality information at the point-of-care, thus facilitating the clinical problem-solving emphasis of the program’s experiential-based curriculum. This experience empowers students with stronger clinical perspectives for the remainder of their didactic studies thereby preparing them to grasp concepts of greater complexity. As a result, faculty are able to design and implement more complex learning experiences for the remaining didactic courses and students are better prepared for and achieve greater depth of understanding resulting in better preparation to more fully engage in their final nine rotations thereafter.

**PAS 702 Clinical Rotation (4 credits)**
Please refer to listing of supervised clinical practice experience types below

**PAS 703 Clinical Rotation (4 credits)**
Please refer to listing of supervised clinical practice experience types below

**PAS 704 Clinical Rotation (4 credits)**
Please refer to listing of supervised clinical practice experience types below

**PAS 705 Clinical Rotation (4 credits)**
Please refer to listing of supervised clinical practice experience types below

**PAS 706 Clinical Rotation (4 credits)**
Please refer to listing of supervised clinical practice experience types below

**PAS 707 Clinical Rotation (4 credits)**
Please refer to listing of supervised clinical practice experience types below

**PAS 708 Clinical Rotation (4 credits)**
Please refer to listing of supervised clinical practice experience types below

**Supervised Clinical Practice Experiences:**
The final nine clinical practice experiences (SCPEs) serve as the culminating learning activities for students in the physician assistant program. During each rotation students work with certified practicing clinicians (referred to as preceptors) and actively participate in the delivery of patient-centered care as part of the health care team.

Each four-week core clinical practice rotation provides an opportunity to learn, understand, and gain supervised experience in practicing principles associated with rotation specific experiences.
Brief descriptions of each SCPE type is included below (please note: students have already completed a Family Medicine or Primary Care rotation)

- **Family Medicine Rotation:** The focus of this rotation is holistic, outpatient-based, relationship-centered care of patients of all ages. Emphasizes include management of commonly encountered primary care conditions, evidence-based preventive practices, and patient education.

- **Primary Care Rotation (Behavioral and Mental Health Care emphasis):** Focus areas include diagnosis and treatment of mental health disorders (pharmacotherapeutic and psychotherapeutic), health promotion and wellness, and appreciating the dynamic bidirectional influences between the psychosocial and all aspects of health and disease.

- **Primary Care Rotation (Rural and/or Underserved Care emphasis):** The focus of this preceptorship is evaluation and management of commonly encountered primary care conditions in a rural and/or medically underserved setting for patients of all ages and cultural backgrounds.

- **Internal Medicine Rotation:** The focus of this preceptorship is providing longitudinal health care for patients with chronic health problems.

- **Pediatrics Rotation:** The focus of this preceptorship is acute and preventive health care for pediatric patients.

- **Obstetrics/Gynecology Rotation:** Focus for this preceptorship includes obstetrical, gynecologic, and women’s preventive care.

- **Emergency Medicine Rotation:** Emphasis of this preceptorship is evaluation and management of emergent medical conditions in the emergency department setting.

- **General Surgery Rotation:** This rotation provides exposure to the operating room setting and function. The focus of this preceptorship is on evaluation and care of patients with commonly encountered conditions requiring surgical management.

- **Inpatient Selective Rotation:** This mandatory rotation includes a focus on providing care in the inpatient setting and may be chosen from available medical or surgical (sub)specialty preceptorships with significant inpatient populations.

- **Open Elective Rotation:** This mandatory elective rotation provides students the opportunity to gain experience in a specific area of interest and may include a medical or surgical (sub)specialty, academic medicine, or medical research.

**PAS 799 Summative Seminar** (0 credits)
The purpose of this pass/fail seminar is twofold: 1) for students to demonstrate knowledge, patient care skills, and professional competency sufficient to function as an entry-level physician assistant and 2) to prepare graduation candidates for the Physician Assistant National Certifying Examination (PANCE).

**PED 718 Examining Occupational Therapy’s Role with Children & Youth** (3 credits)
This course offers students the opportunity to explore and analyze evidence associated with current and emerging areas of occupational therapy practice addressing the occupational performance needs of children and youth. This course will analyze the
current Pediatric Frames of References and best evidence available to guide occupational therapists in the evaluation and intervention process to provide contemporary and innovative occupational therapy services to children and youth in diverse environments. During this course, students will have the opportunity to develop a professional presentation and write a case study treatment plan.

PED 728  Pediatric Occupational Therapy Service Delivery:  (3 credits)  
School-Based Services, Medical Practices, & the Community
This new course will explore the environmental context of occupational therapy services for children and youth. Students will discuss laws governing occupational therapy services in both school-based and medical/private practice settings. Students will utilize evidence-based practice within the setting discussed and analyze outcome effectiveness of occupational therapy services. Students will use critical reasoning to compare and contrast service delivery systems including early intervention, school-based services, medical practices, and community service delivery. A program service evaluation or client-based case study will allow students to synthesize new learning.

PED 738  Sensory Processing, Social, & Behavioral Disorders: Addressing Participation in Occupation
This course requires students to explore the role of occupational therapy on promoting participation in occupation for children with sensory processing, social, and behavioral needs. Focus will be on analysis of current diagnostic criteria and critically questioning and appraising the state of current and emerging evidence on assessments, outcome measures and intervention to promote best practices for children and youth. Diagnoses covered within this course include sensory processing disorder, autism, ADHD, and anxiety. Students will engage in critical reasoning within forum discussions, analyzing intervention strategies, and developing a client-based case study.

PMH 682  Psychopharmacology  (3 credits)
In this course, students focus on prescribing and monitoring psychopharmaceutical and alternative therapeutic agents in conditions commonly encountered by the psychiatric/mental health advanced practice nurse. This course focuses on advanced concepts in neuroscience, pharmacogenomics, pharmacodynamics, pharmacokinetics in the integration of evidence-based prescribing, as well as ethical and legal aspects of pharmacotherapeutics.

PMH 692  Psychotherapeutic Assessment & Practice  (3 credits)
This course explores the theoretical foundations of psychotherapy and therapeutic modalities, and strategies to implement evidence-based therapeutic modalities in advanced nursing mental health practice. Learning focuses on advanced psychiatric assessment including mental status exam and psychiatric history and the application of theory-directed implementation and evaluation of individual, family, and group therapies across the lifespan and in multiple settings.

PMH 694  Specialty Focus I (Adults & Older Adults)  (6 credits)
Students will apply knowledge of advanced health assessment, psychopathophysiology, psychopharmacotherapeutics, and psychotherapy/therapeutic modalities in the
recognition and management of acute and serious mental illness in clinical settings. The population of interest for this course is adult women and men and the older adult (65 plus years of age). Genetic, age, gender, and cultural influences will be considered as differential diagnosis and treatment plans are proposed. Laboratory findings, diagnostic studies will be integrated into the plan of care. The physical, ethical, legal and social aspects of providing mental health care to adults and aging adults will be explored. *(180 clinical clock hours)*

**PMH 710 Advanced Clinical Science: Psychiatry** *(3 credits)*
This course explores the role of various factors including neurotransmitters, genetics, hormones, immunity, and inflammation on behaviors such as appetite, anger, aggression, sleep, sex, social attachment, memory, and attention. The neuroscience model will be used to investigate the pathophysiologic mechanisms that underlie psychiatric disorders including depression, anxiety, schizophrenia, and Alzheimer disease.

**PMH 712 Specialty Focus II (Children, Adolescents, & Families)** *(6 credits)*
Students will continue to apply knowledge of advanced health assessment, psychopathophysiology, psychopharmacotherapeutics, and psychotherapy/therapeutic modalities in recognition and management of acute and serious mental illness, and mental health, most often seen in the pediatric and adolescent population aged 0-18 years of age. Differential diagnoses and treatment plans will include genetic, age, gender, cultural influences and developmental milestones, as well as laboratory findings, and diagnostic studies. Strategies and interventions in education, family support, and facilitated family and group communication specific to mental health will be included. *(180 clinical clock hours)*

**PMH 720 Psychiatry Diagnostics & Therapeutics I** *(3 credits)*
This course focuses on the psychiatric interview for the accurate diagnosis of psychiatric conditions and the implementation of comprehensive treatment plans. In addition to psychiatric pharmacology, crisis intervention and risk management will be reviewed. The course will also explore the ethical and legal issues associated with the diagnosis and treatment of psychiatric disorders. Neurodevelopmental, psychotic, mood, anxiety, obsessive-compulsive, trauma-related, stressor-related, dissociative, and somatic disorders will be covered in this course.

**PMH 730 Psychiatry Diagnostics & Therapeutics II** *(3 credits)*
This course is a continuation of the Psychiatry Diagnostics & Therapeutics course series, building upon the concepts that were explored in Psychiatry Diagnostics & Therapeutics I. Eating, sleep, sexual, gender identity, disruptive, impulse control, conduct, substance-related, neurocognitive, and personality disorders will be covered in this course.

**PMH 734 Specialty Focus III (Setting & Population-Based Care)** *(6 credits)*
Students will develop and apply knowledge in the recognition & management of acute and serious mental illness to individuals, families, and groups in specific settings and populations. Settings include but are not limited to prisons, addiction and pain clinics,
homes, and student health clinics. Populations include but are not limited to the marginalized or underserved, e.g., homeless, immigrant, refugee, and veteran populations. These settings and populations are unique to those experienced in previous clinical courses, giving the students exceptional experience in interprofessional communication and resource procurement, and a broad range of application of evidence-based practice in the most current and critical of acute and serious mental illness management.

**PT 700  Physical Therapy & Professionalism** (3 credits)
An overview of the healthcare delivery system and of the professional roles of doctorally-prepared 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.

**PT 701  Foundational Sciences 1: Human Anatomy** (5 credits)
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 multimedia. The course is projected to have a strong interactive, online component.

**PT 704  Intervention 1: Physical Therapy Procedures** (2 credits)
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.

**PT 705  Critical Inquiry 1: Introduction to Research Methods** (2 credits)
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.

**PT 707  Physical Therapy Evaluation** (2 credits)
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.

**PT 711 Foundational Sciences 2: Kinesiology/Pathomechanics 1** (4 credits)
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. Focus will be on the lower quarter. Emphasis will be placed on mechanical, neuroregulatory, and muscular influences upon normal and pathological motion.

**PT 714 Intervention 2: Physical Agents** (2 credits)
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.

**PT 716 Pharmacotherapy** (1 credit)
This course will introduce basic pharmacological concepts such as pharmacotherapeutics, dynamics, and kinetics and their application to physical therapy practice. The impact of prescribed and over the counter (OTC) drugs on the outcome of therapy interventions will be explored. The course also emphasizes current evidence regarding medication/drugs and their relation to physical therapy practice.

**PT 717 Professionalism 3: Ethics and Physical Therapy** (3 credits)
This course provides a comprehensive overview of physical therapy ethics and legal practice issues. Students explore and analyze the APTA’s Code of Ethics and the Guide for Professional Conduct. Students define, describe, and evaluate moral, ethical, and legal issues pertaining to physical therapy practice in a variety of practice settings. APTA’s professional standards, third party payer standards, and licensing board’s ethical requirements are reviewed in depth to facilitate student assessment, comparing and contrasting, and analysis of these important documents. Students will explore various sociocultural topics and explore the patient/client perspective. The development of skills to prepare students to be culturally competent in physical therapy practice is emphasized. Teaching and learning methods, informatics, and abuse of vulnerable populations will also be discussed. (Lecture 3)

**PT 721 Foundational Sciences 3: Physiology/Histology** (3 credits)
A medical approach to physiological systems as it relates to the practice of physical therapy. This course will include presentations of muscle, cardiac, pulmonary, renal, endocrine, immunology, hematology, reproductive and gastrointestinal physiology. Concepts related to growth, repair, nutrition, digestion, metabolism and homeostasis will also be covered. Content includes the microscopic and submicroscopic structure of human tissue. This course will emphasize the various levels of control involved in each body system and will address the functions of cells, tissues, organs and organ systems. Throughout the course, feedback loops will be used to describe the communication involved in maintaining normal function as well as how pathology is a consequence of
altered feedback mechanisms. Mastery of this information will lay the educational foundation for students to understand other basic science and clinical disciplines. The PT 722 Foundational Sciences 3: Applied Physiology course will run concurrently to help students apply the concepts to the realms of physical therapy.

**PT 723 Professionalism 4: Specialty Practice (3 credits)**
This course focuses on specialty practice areas in physical therapy. Topics include pelvic health, vestibular rehab, ENMG, imaging, and the integumentary system. Current practice and technology, emerging issues, and future opportunities in Physical Therapy will be explored in relation to these specialty practice areas. (Lecture 3)

**PT 724 Intervention 3: Therapeutic Exercise (3 credits)**
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 relates to pathologic conditions commonly seen in physical therapy practice.

**PT 725 Evidence-based Practice 1 (2 credits)**
This is the first in a four-course sequence in evidence-based practice that provides students with the foundational knowledge and skills necessary to conscientiously, explicitly, and judiciously use current best evidence in making clinical decisions. This course builds on the information from the critical inquiry series. The course focuses on the components of evidence-based practice, formulating answerable clinical questions, and accessing and performing critical appraisals of evidence relevant to clinical practice.

**PT 729 Lifespan 1: Pediatric Physical Therapy (3 credits)**
This class is the first of the Life Span series focused on developmental sequence and treatment across the lifetime of our patients. It will include entry level material intended to allow all students to treat patients with age-appropriate activities and comprehend functional skills for pediatric patients. Students will progress through stages of normal development including reflexes and gross motor skills acquisition in addition to standardized assessments used with children. It is imperative to embrace the entire family system in treating young patients and understand underlying legislation to provide care for children at various ages. In addition to introduction to common pediatric diagnoses, students will be introduced to the role of Health promotion and safety within this specialty area. Students will apply the elements of patient/client management in physical therapy practice, including, screening, examination, evaluation, diagnosis, prognosis, plan of care, intervention, and outcomes assessment to the patient with neuromuscular dysfunction.

**PT 730 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.

**PT 731 Foundational Sciences 4: Kinesiology/Pathomechanics 2 (4 credits)**
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. Focus is on the upper quarter and spine. Emphasis will be placed on mechanical, neuroregulatory, and muscular influences upon normal and pathological motion.

**PT 733 Cardiopulmonary Physical Therapy and Exercise Science (3 credits)**
This course will prepare the student to effectively manage patients with cardiovascular and/or pulmonary impairments and disability. Emphasis is placed on the elements of patient client management in physical therapy practice, including screening, examination, evaluation, diagnosis, prognosis, development of a plan of care, intervention, and outcomes assessment and evaluation. Concepts of exercise physiology and practical application in physical therapy are addressed.

**PT 734 Musculoskeletal Physical Therapy 1 (5 credits)**
The first of two courses in this series, this course prepares the student to practice entry-level physical therapy relative to the management of musculoskeletal conditions. Information related to common orthopaedic conditions and diagnoses is presented. This course will concentrate on the lower extremities and the spine. Information regarding evidence-based approaches in critical thinking and application of psychomotor skills related to examination, evaluation, diagnosis, prognosis, intervention, and outcomes assessment is emphasized. A primer on differential diagnosis and evaluation tools is presented to help students recognize problems that are beyond the physical therapy scope of practice and when/how to refer appropriately within the healthcare community.

**PT 736 Prosthetics, Orthotics and Amputee Training (2 credits)**
This course focuses on care of the patient who has had an amputation or condition that requires external support, including care related to underlying conditions and comorbidities. Topics such as care of residual limb, prosthetics and orthotics, and associated care and training will be discussed.

**PT 738 Physical Therapy Experience (6 weeks) (5 credits)**
The first of four clinical education courses, this course is designed to facilitate socialization of DPT students to the clinical environment and to apply knowledge and basic skills developed up to this point in the curriculum in a real world setting. Students will participate in direct patient care while being instructed and supervised by clinical faculty members. Student activities may include, but are not limited to, patient examination, patient treatment, patient and family education, article presentations, and aspects of patient care.
PT 739  **Lifespan 2: Geriatric Physical Therapy**  (2 credits)
This class is the second of the Life Span series focused on developmental sequence and treatment across the lifetime of our patients. The focus of this course is the biopsychosocial aspects of aging in order to understand the complexities of geriatric care. Integration of the physical aging process, appropriate, evidence-based evaluation techniques, outcome measures, as well as the design of effective treatment plans are discussed. (Lecture 2)

PT 740  **Management Sciences in Physical Therapy**  (2 credits)
This course examines current issues and trends in physical therapy clinical management. Specific topics include: (1) leadership and management principles; (2) human resource management issues, including: recruitment, selection, and retention of staff and managerial human resources; leadership; supervision, and delegation; performance appraisal; training and development activities; compensation issues; management-labor relations; grievance and discipline; work place safety; and employment law and regulations; (3) health care finance, including clinical budgeting, financial statements and ratios, and reimbursement issues; (4) marketing of PT professional services; and (5) information, quality, and risk management.

PT 741  **Foundational Sciences 5: Neuroscience**  (4 credits)
This course includes the study of human neuroanatomy and neurophysiology, with emphasis on the relationship between structure, function, and control of the human nervous system in normal and diseased states.

PT 742  **Pathophysiology**  (2 credits)
This course expands on concepts introduced in anatomy and physiology and focuses on pathophysiology and disease frequently seen in physical therapy practice.

PT 744  **Musculoskeletal Physical Therapy 2**  (5 credits)
The second of two courses in this series, this course prepares the student to practice entry-level physical therapy relative to the management of the musculoskeletal conditions. This course will concentrate on the upper extremities, trunk and the cervical spine. Information related to common orthopaedic conditions and diagnoses is presented. Information regarding an evidence-based approach in critical thinking and application of psychomotor skills related to examination, evaluation, diagnosis, prognosis, intervention, and outcomes assessment is emphasized. A primer on differential diagnosis and evaluation tools is presented to help students recognize problems that are beyond the physical therapy scope of practice and how/when to refer appropriately within the healthcare community.

PT 746  **Differential Diagnosis/Physical Assessment**  (2 credits)
This course builds on examination, evaluation, and screening knowledge and skills introduced in previous courses focusing on differential diagnosis/physical assessment as it applies to physical therapy. This course covers concepts of probability-based differential diagnosis and presents the evidence for diagnosis using properties of diagnostic tests such as sensitivity, specificity, likelihood ratios, and predictive values.
Pathology of the major body systems and regions will be covered with current evidence-based practice diagnostic standards as they are available in the professional literature.

**PT 754  Neuromuscular Physical Therapy  (5 credits)**
The first of two courses in this series, this course prepares the future physical therapist to effectively manage patients with neuromuscular dysfunction. Students will apply the elements of patient/client management in physical therapy practice, including screening, examination, evaluation, diagnosis, prognosis, plan of care, intervention, and outcomes assessment to the patient with neuromuscular dysfunction. The emphasis in this first course will be on the pediatric patients developing toward adulthood.

**PT 755  Evidence-based Practice 4  (2 credits)**
The final course in the evidence-based practice series, this is a limited residency course that includes distance and online coursework while students are on a clinical internship, as well as on-campus presentation and evaluation activities. Students will develop and present evidence of their knowledge, skills, and abilities in applying evidence-based practice to patient management in a clinical setting.

**PT 764  Neuromuscular Physical Therapy 2  (5 credits)**
The second of two courses in this series, this course prepares the future physical therapist to effectively manage patients with neuromuscular dysfunction. Students will incorporate and build upon concepts and skills developed in the first course. Students will learn to effectively manage adult patients with specific neurological diagnoses. Emphasis will be placed on using an evidence-based approach to developing knowledge and skills in managing a variety of common conditions, including spinal cord injury, cerebrovascular accident, vestibular dysfunction, traumatic brain injury, and multi-system neurologic conditions. The effects of aging and Geriatric neurological conditions will also be considered.

**PT 770  Clinical Integrations  (2 credits)**
This course is strategically placed in semester 6 at the conclusion of the didactic portion of the Doctor of Physical Therapy program just before student therapists go out on extended clinical rotations. It is designed to aid students in assimilating content from all clinical management courses. Students are asked to analyze complex case scenarios, utilize evaluation skills, and design interventions including patient/family education and home exercise programs. Students work in teams to plan and rehearse each element of patient management to address case-based problems or patient simulations with consultation from faculty. Components of clinical practice that are integrated in this course include: interpersonal communication, utilization of evidence-based practice, examination, evaluation, plan of care establishment, intervention execution and modification, documentation, billing, and self and peer review. This course is designed to prepare students to make the transition from the classroom to the clinic.

**PT 788  Clinical Internship 1 (15 weeks)  (13 credits)**
The second of four clinical education courses, this course is designed to incorporate knowledge and skills obtained and enhanced during the first short term clinical experience and synthesize information and skills developed in the final didactic portion
of the curriculum. Students will participate in direct patient care while being instructed and supervised by clinical faculty members. Student activities may include, but are not limited to, patient examination, patient treatment, patient and family education, article presentations, and all aspects of patient care and most aspects of patient/client management. It is anticipated that the student PT should be able to carry a caseload and work independently (with appropriate supervision) with most simple and many complex patient types by the end of this clinical experience.

PT 798  Clinical Internship 2 (15 weeks)  (13 credits)
The third of four clinical education courses, this course is designed to incorporate knowledge and skills obtained and enhanced during the first two clinical experiences and synthesize/appraise information and skills developed in the final didactic portion of the curriculum. Students will participate in direct patient care while being instructed and supervised by clinical faculty members. Student activities may include, but are not limited to, patient examination, patient treatment, patient and family education, article presentations, and all aspects of the patient/client management model appropriate to the setting. It is anticipated that the student PT will be able to demonstrate entry-level performance by the end of this clinical experience, for many of the criteria.

PT 799  Clinical Internship 3 (15 weeks)  (13 credits)
This final clinical education course is designed to incorporate knowledge and skills obtained and enhanced during the first three clinical experiences and synthesize/appraise information and skills developed in the final didactic portion of the curriculum. Students will participate in direct patient care while being instructed and supervised by clinical faculty members. Student activities may include, but are not limited to, patient examination, patient treatment, patient and family education, article presentations, and all aspects of the patient/client management model appropriate to the setting. It is anticipated that the student PT will be able to demonstrate entry-level performance by the end of this clinical experience.

RS 600  Connective Tissue and Healing  (3 credits)
This course provides an overview of connective tissue injury including degenerative processes, healing, and rehabilitation implications. Understanding of the relationships among connective tissues such as bone, ligaments, cartilage, capsule, tendon and muscle on a micro and macro level will be emphasized. Sports injuries, issues of aging, and rehabilitation principles in special populations will also be included. These principles will be applied to treatment procedure choices in rehabilitation.

RS 607  Preventative Measures  (3 credits)
This course will expose students to contemporary topics in athletic training clinical practice such as, mild brain injury, environmental illnesses and musculoskeletal injury. Students will examine and synthesize current research on these topics and present evidence-based preventative measures in order to curb their incidence.
RS 615 Functional Assessment and Rehabilitation in Sport (3 credits)
The purpose of this course is to examine evidence-based objective measures of proprioception, flexibility and strength required of individuals engaged in sport. Through a case-based format, students will formulate and present rehabilitation interventions to address physical impairments found during functional assessment.

SLP 601 Evidence-Based Practice in Speech-Language Pathology (2 credits)
This course is designed to prepare speech-language pathology students 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 clinical environments. This course focuses on the concepts of evidence-based practice, with emphasis on forming answerable clinical questions and effective literature search strategies. The EBP approach prepares students to find, appraise, and integrate evidence for clinical decision-making, with particular emphasis in this course on (a) prognosis for a given client, and (b) effectiveness of clinical interventions. Based on presentation of case scenarios, students will formulate the key question(s), rapidly search medical and health-related databases, select best available evidence, appraise the evidence using the EBP approach, and describe application of the evidence in a clinical context.

SLP 602 Speech-Language Pathology Clinical Supervision 1 (3 credits)
This course is designed to prepare the student with knowledge to assume the role of a speech-language pathology clinical supervisor. Topics related to supervision include its definition, history, theories, resources, major roles/responsibilities/styles of clinical supervisors, diversity, and expectations/needs of supervisees; the supervision of graduate students, speech-language pathology assistants, Clinical Fellows, and other rehabilitation professionals will be discussed.

SLP 603 Speech-Language Pathology Clinical Supervision 2 (3 credits)
This course builds on the knowledge derived from SLP 602 by introducing students to advanced clinical teaching skills requiring critical thinking and clinical problem solving and ethical decision-making. Students will also demonstrate effective communication and interpersonal skills, including accommodations appropriate for personal/cultural/linguistic factors and conflict resolution. Students will examine the research questions and methodology in the supervision literature. Students will identify supervision needs, develop a plan of action, demonstrate supervisory competence, and engage in effective supervisory behavior that includes advocacy, and recognition of the critical role of inter-professional practice.

SLP 605 Ethics in Speech-Language Pathology (2 credits)
This course provides a comprehensive overview of ethics in the clinical practice of speech-language pathology (SLP). Students define and distinguish moral, ethical and legal foundations in clinical practice, analyze the cardinal documents of the profession, and compare and contrast national and state ethical standards. Additional topics include theories of ethics, professional malpractice, ethical principles of research, ethical
decision-making, and how ethics can impact the various environments in which SLP practice occurs.

**SLP 606 Capstone 1: Speech-Language Pathology**  
(3 credits)  
This course is designed to provide students with the foundation for successful completion of an evidence-based practice (EBP) project. This course emphasizes knowledge of current expectations for speech-language pathologists engaging in EBP in clinical practice, familiarizing students with capstone progression, project quality and scope, and doctoral-level communication requirements. Each student is expected to develop the introduction, literature review, and method for the capstone project, and, if appropriate, submit the project to the institutional review board.

**SLP 607 Capstone 2: Speech-Language Pathology**  
(3 credits)  
This course is designed as a culmination of the student’s learning experiences, with an emphasis on the implementation and presentation of a complete evidence-based practice (EBP) project. Students are expected to demonstrate depth of knowledge in select areas of clinical practice through the advanced synthesis of information and expertise in interpreting and applying clinical research. The ultimate goal of the capstone project is that students will demonstrate the ability to function as independent clinician researchers and to use their knowledge and skills in order to effect systems change in professional environments.

**SLP 609 Capstone 3: Speech-Language Pathology**  
(3 credits)  
This course is designed as a culmination of the student’s learning experiences, with an emphasis on the implementation and presentation of a complete evidence-based practice (EBP) project. Students are expected to demonstrate depth of knowledge in select areas of clinical practice through the advanced synthesis of information and expertise in interpreting and applying clinical research. The ultimate goal of the capstone project is that students will demonstrate the ability to function as independent clinician researchers and to use their knowledge and skills in order to effect systems change in professional environments.

**SLP 610 Single Subject Research in Speech-Language Pathology**  
(3 credits)  
This course explores the general research principles of single subject (small N) research across the lifespan (children and adults), with an emphasis on the discipline of speech-language pathology. Application of this method of research is explored through the primary designs that constitute this type of research: withdrawal/reversal, multiple baseline, alternating treatment, and changing criterion.

**SLP 612 Neural Bases for Communication & Swallowing**  
(3 credits)  
Examination of the central and peripheral nervous systems as they relate to normal and disordered human communication. Overview of neuroanatomy and neurophysiology, common neuropathologies relevant to communication disorders, and strategies in neurogenic problem solving.
SLP 616  Assessment/Treatment of Childhood Speech Sound Disorders  (3 credits)
Exploration of acquisition, assessment, and treatment of articulation and phonological disorders in children.

SLP 618  Assessment/Treatment of Childhood Language Disorders  (3 credits)
Principles and methods of prevention, diagnosis and intervention applicable to developmental language disorders. Includes consideration of both oral and written developmental language.

SLP 619  Practicum in Speech-Language Pathology  (1 credit)
Examination of the diagnostic, treatment and documentation procedures in speech-language pathology occurring through active observation in the clinical environment and classroom instruction. Active, supervised participation in the clinical process with emphasis on individualized assessment, treatment, counseling and documentation procedures.

SLP 620  Medical Speech Language Pathology  (1 credit)
Roles and responsibilities of speech-language pathologists in medical settings with patients spanning the lifespan and a variety of diagnoses. Topics include medical models, assessment/intervention models in medical settings, medical bioethics, pharmacology, medical terminology, and documentation.

SLP 622  Clinic Class I  (1 credit)
Directed observation to develop critical observation knowledge and skills related to typical and disordered communication.

SLP 623  Research Methods  (1 credit)
An overview of what constitutes clinical research. The class instructs students in how to understand the strengths and weakness of various research methods. An overview of research ethics, and application of research results to clinical practice.

SLP 624  Assessment/Treatment of Motor Speech Disorders  (2 credits)
The role of central and peripheral motor systems in speech production and speech disorders related to abnormalities in these motor systems. Emphasis on the neurological bases, assessment, and clinical management of the dysarthrias and apraxia of speech across the lifespan.

SLP 626  Assessment/Treatment of Neurogenic Language Disorders  (2 credits)
A clinically-oriented exploration of the aphasias, and related central nervous system language disorders is integrated within the broader field of neurolinguistics. Clinical aspects focus on assessment and intervention approaches in aphasia and related disorders.

SLP 628  Clinic Class II  (1 credit)
An examination and exploration of the topics of diversity and professional ethics as they involve clinical speech-language pathology.
SLP 630  Capstone Seminar I  (1 credit)
Review of basic research issues and concepts in order to prepare to be a consumer of research literature and to prepare for your project. Includes various research types and designs, validity, quantitative and qualitative data analysis and clinical applications of research.

SLP 632  Practicum in Speech-Language Pathology  (1 credit)
Examination of the diagnostic, treatment and documentation procedures in speech-language pathology occurring through active observation in the clinical environment and classroom instruction. Active, supervised participation in the clinical process with emphasis on individualized assessment, treatment, counseling and documentation procedures.

SLP 634  Capstone Seminar II  (1 credit)
As you advance into your topic, you will begin the outlining and writing process with possible preparation for data collection. This seminar will guide you through this phase of your capstone, which is a scholarly project with topics that may involve prevention, assessment, literature review, case presentation or intervention involving the scope of practice for speech-language pathologists.

SLP 636  Assessment/Treatment of Pediatric Dysphagia & Feeding Disorders  (1 credit)
Examination of the principles and procedures used in the assessment and treatment of pediatric swallowing and feeding disorders. Includes clinical and instrumental assessment and intervention methods applicable to pediatric feeding and swallowing disorders across a variety of pediatric practice settings.

SLP 638  Tracheotomy & Ventilator Dependent  (1 credit)
Foundational concepts for speech-language pathologists who function on teams that provide assessment and intervention of persons who are tracheotomy or ventilator-dependent.

SLP 640  Clinic Class III  (2 credits)
An examination and exploration of the topics of professional issues, regulations and law as they involve clinical speech-language pathology.

SLP 642  Practicum in Speech-Language Pathology  (2 credits)
Examination of the diagnostic, treatment and documentation procedures in speech-language pathology occurring through active observation in the clinical environment and classroom instruction. Active, supervised participation in the clinical process with emphasis on individualized assessment, treatment, counseling and documentation procedures.

SLP 644  Assessment/Treatment of Adult Dysphagia  (3 credits)
Study of the anatomic and physiologic systems involved in normal swallowing and swallowing disorders (dysphagia) in adults. Emphasis on the role of the speech-language pathologist in the areas of assessment and treatment of dysphagia and as a
team member in the areas of dysphagia-related counseling, ethical and quality of life issues.

**SLP 646 Assessment/Treatment of Cognitive-Communication Disorders** (2 credits)
An investigation of acquired, cognitive-based language disorders including traumatic brain injury (including right brain injury), related cognitive communication sequelae, and dementia. Emphasis on assessment and treatment of cognitive communication disorders.

**SLP 648 Assessment/Treatment of Voice & Resonance Disorders** (2 credits)
Examination of the physiology acoustics, and perception of voice quality and speech resonance, as well as the etiologies, diagnosis, and management of voice and resonance disorders.

**SLP 650 Assessment/Treatment of Fluency Disorders** (2 credits)
Examination of the diagnosis and assessment related to fluency across the lifespan. Procedures specific to the differential assessment of fluency are examined, evaluated and related to therapeutic strategies and the methods of behavior change.

**SLP 652 Augmentative and Alternative Communication Disorders** (3 credits)
Introduction to alternative and augmentative communication systems for consumers. Discussions include the use of aided and unaided communication systems, assessment procedures and intervention, including education and team approaches.

**SLP 654 Clinic Class IV** (2 credits)
An examination and exploration of clinical documentation and reporting, as well as business organization/planning as they involve clinical speech-language pathology.

**SLP 658 Practicum in Speech-Language Pathology** (3 credits)
Examination of the diagnostic, treatment and documentation procedures in speech-language pathology occurring through active observation in the clinical environment and classroom instruction. Active, supervised participation in the clinical process with emphasis on individualized assessment, treatment, counseling and documentation procedures.

**SLP 660 Clinic Class V** (2 credits)
Topics will focus on advanced clinical topics, EPB, supervising assistants.

**SLP 668 Capstone Seminar III** (1 credit)
This seminar will facilitate the data collection with an eye on analysis for your capstone project. You will continue to plan, write and target clinical and empirical aspects of research and you will re-visit ethics, and evidence based practice concepts.

**SLP 707 Instrumentation & Procedure Validation Lab** (4 credits)
This course will help you develop competency of current instrumentation techniques used to evaluate acoustic, aerodynamic and physiological aspects of speech, voice and swallowing. Your procedural competency will be developed and validates with rigid and
flexible endoscopy, nasometry, fees and additional acoustic and aerodynamic procedures as well as ability to program and utilize AAC devices.

SLP 710  Aural Rehabilitation (1 credit)
Theory and methods of habilitation/rehabilitation for communication disorders associated with hearing impairment across the life span. Includes a focus on visual and auditory speech signals, the function/use of amplification, auditory training for persons with hearing impairment, and speech-language intervention secondary to hearing impairment.

SLP 712  Advanced Medical Seminar (2 credits)
Exploration of the medical aspects of our field. Topics will emphasize current practice methods and models of across the lifespan including ethics, end of life care, medical decision making.

SLP 713  Advanced Seminar: Early Intervention (2 credit)
This seminar will examine the best practices of working with the birth to three population and their families. We will explore the elements of different practice models including family centered support, primary service provider model and home-visit based approach. You will learn how to write an appropriate IFSP and how to target appropriate goals and outcomes.

SLP 714  Advanced Seminar: Cranio-Facial Anomalies (2 credit)
An investigation of cleft lip and/or palate and related anomalies that influence communication, with an emphasis on assessment and intervention of the communication disorders related to these impairments.

SLP 715  Advanced Seminar: Autism Spectrum Disorders (2 credits)
An exploration into the latest research and evidence-based practices in autism. Topics include medical care for individuals with autism, family dynamics and lifespan issues.

SLP 716  Advanced Seminar: Cancers of the Head & Neck (2 credits)
Focus on the speech, voice and swallowing disorders associated with cancers of the head and neck, with a special emphasis on laryngectomy. Includes discussion of team engagement, consumer education, intervention and treatment.

SLP 717  Clinic Class V (1 credit)
Topics will focus on advanced clinical topics, EPB, supervising assistants.

SLP 718  Advanced Seminar: Assistive Technology (1 credit)
This one hour seminar will take a deep dive into advanced topics dealing with assertive technology and Augmentative and Alternative Communication including service delivery that includes recognizing ethical dilemmas that can arise when delivering AT services, identifying legislation that shapes services provided to adults and children and identifying AT funding sources. The latest publications and evidenced-based practice will be utilized in order to provide the most current updates in this topic area.
SLP 719  Counseling  (1 credit)
Counseling theory, process, and application to individuals who present a variety of communication disorders and to the families of these individuals, with an emphasis on the discipline of speech-language pathology.

SLP 720  Capstone Seminar IV  (2 credits)
This seminar will advance your data collection phase and begin to target data analysis for your capstone project. You will develop your written deliverable project in preparation for the final stage of the capstone.

SLP 721  Biostatistics Interpretation  (3 credits)
The purpose of this course is to learn basic interpreting biostatistics reported in peer-reviewed journal articles. Topics will include ways of describing data, how to graphically display data, and looking for and testing relationships or differences in data.

SLP 722  Practicum in Speech-Language Pathology  (3 credits)
Examination of the diagnostic, treatment and documentation procedures in speech-language pathology occurring through active observation in the clinical environment and classroom instruction. Active, supervised participation in the clinical process with emphasis on individualized assessment, treatment, counseling and documentation procedures.

SLP 727  Speech-Language Pathology Practice: Organization & Management  (2 credit)
The primary professional focus for speech-language pathologists (SLPs) typically involves clinical practice; that practice can occur in a wide variety of settings, each with its own unique challenges and opportunities. This course explores current issues of organization and ongoing management of SLP clinical practice, with an emphasis on administration/organization/management of healthcare, school, and private practice settings.

SLP 734  Practicum in Speech-Language Pathology  (4 credits)
Offsite clinical practicum experience completed under the supervision of community-based qualified and certified speech-language pathologists. Emphasis on the evaluation and treatment of disorders related to speech, language, cognitive-communication, and swallowing.

SLP 735  Clinic Class VI  (1 credit)
Class topics will focus on transitioning from student to professional and preparing for your Clinical Fellowship Year.

SP 522  Applications of Strength and Conditioning in Sport Performance  (3 credits)
This course will focus on the foundational nature of strength and conditioning. Topics will include exercise physiology, biochemistry, anatomy and biomechanics. Special consideration will be placed on how principles of strength and conditioning relate to various areas.
SP 615  Advanced Sport Performance Technology  (3 credits)
This course will focus on technologies that have been developed to reach human interests or goals related to a particular sport. It will focus on the types, and appropriate selection and use of technology by which sport performance coaches attempt to improve training and competitive surroundings and enhance overall athletic performance. The course will provide knowledge and application of using specialised equipment and the latest modern technologies to perform tasks more efficiently, such as equipment, athletic sports gear (clothing and footwear), advanced computer stimulations and motion capture.

SP 620  Program Design for Sport Performance  (3 credits)
This course will examine the outcomes associated with differential resistance training regimens. Emphasis is placed on training principles centered around periodization, variation, and progression of the acute program variables of frequency, intensity, volume, and rest across cycles of training to prevent overtraining and promote optimization of performance in various areas. This course also requires that the student participates in a practicum/internship based on the application of program design.

TDPT 508  Directed Independent Study  (3 credits)
This directed independent study project provides each student with an individually tailored opportunity for an evidence-based reflective analysis of pediatric patient care. Using the evidence-based skills and competencies gained from courses in the first semester, this project allows the pediatric physical therapist to carefully analyze care administered for a selected patient related to current best evidence.

WE 610  Population Health Issues  (3 credits)
In this course the health issues of specific populations will be discussed, including gender and age specific populations, as well as one or two additional populations driven by class preferences. Additional populations may include shift workers, various ethnic groups, or religious groups. Health and well-being issues specific to each population selected will be discussed and explored and evidence-based strategies developed to address the issues for each population. The ecological model of health promotion will be explored. Class format will include lecture and small group activities.

WE 623  Theoretical Foundations and Evidence-Based Practice in Health Promotion & Wellness  (3 credits)
This course will provide an analysis health promotion, health education, public health, primary prevention, lifestyle behavior, 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 analyzed. 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,
weight, sleep, emotional wellness, social support, and stress. Evidence-based practice for primary and tertiary prevention of chronic diseases through the adoption of healthy behaviors will be analyzed. Strategies for adopting and assessing change in biometric measures related to positive health behaviors will be explored.

**WE 630 Nutrition & Exercise for Health & Wellness (3 credits)**
This course includes an overview of chronic diseases and associated risk factors. The effects of behaviors in the etiology and treatment of chronic diseases are examined. Emphasis is placed on the effects of modifying behaviors such as nutrition, physical activity, sleep, smoking, and alcohol use as well as stress reduction. The role of exercise and diet in integrative lifestyle medicine is explored. Basic skills in exercise prescription and nutritional intervention strategies within scope of practice are developed.

**WE 700 Theories of Behavior Change (3 credits)**
This course is designed to expose the student to the fundamental theories driving research and practice in health education, and to provide an opportunity for the student to put theory into practice based on current evidence. A variety of theories will be reviewed and the opportunity for the student to become familiar with the literature applying the theories provided. Working in a group, students will design a health education program based on a given theory and supported by evidence and present the findings to the class. Class format will include lecture and group activities.

**WE 710 Theories & Application of Wellness Coaching (3 credits)**
This course explores the theoretical basis and the evidence supporting health and wellness coaching. The concept and structure of the coaching approach for facilitating sustainable behavior change is examined. The major tenets of coaching strategies including motivational interviewing, appreciative inquiry, and positive psychology are explained and practiced. The coaching process is emphasized with focus placed on developing one-on-one practical coaching skills. Several synchronous sessions are required.

**WE 711 Advanced Wellness Coaching (3 credits)**
This course provides an opportunity to practice and develop advanced wellness coaching skills required for teaching and practicing wellness coaching within healthcare settings. Motivational interviewing and positive psychology for health behavior change and the coaching relationship are emphasized within the context of improving coaching skills to enhance patient health and wellness. Coaching presence and resiliency will be discussed. In addition, exploration of implicit and explicit bias in healthcare and the role these biases play in the coaching relationship and health disparities will be explored. Class format will include self-assessment, lecture, discussions, and small group experiential activities. On site days will focus on development of wellness coaching tasks, skills, mentored practice, and demonstrations.

**WE 717 Integrative Therapies in Health Promotion (3 credits)**
The use of complementary and alternative therapies in the context of health promotion will be explored in this course using an evidence-based approach. Topics introduced
may include energy medicine (Reiki, Qi gong, healing touch), manipulative and body-based practices (massage therapy, reflexology, Rolfing, Trager bodywork, Alexander technique, Feldenkrais), or mind-body approaches (relaxation, hypnosis, visual imagery, meditation, yoga, biofeedback, tai chi, prayer). Class format includes lecture, small group work, and hands on activities.