

# **Physician Assistant (PA)**

#### **Courses**

#### PA 507. Medical Human Anatomy & Radiology I. 3 Credits.

This online course is a review of the basic principles of anatomy in preparation for the clinical phase of the PA program. The students will be introduced to components of radiologic diagnostic studies such as x-ray, CT scans and other forms of imaging. Prerequisite: Admission to Master of Physician Assistant Studies Program. SS.

#### PA 508. Medical Human Anatomy & Radiology II. 3 Credits.

This course is held online and on the UND campus and is a continued review of the basic principles of anatomy in preparation for the clinical phase of the PA program. The students will review radiologic diagnostic studies such as x-ray, CT scans and other forms of imaging. Prerequisite: Admission to Master of Physician Assistant Studies Program. F.

#### PA 510. Human Physiology & Pathophysiology I. 4 Credits.

This system-based online course focuses on the physiologic and pathophysiologic functions of the human body from the cellular level, to organ systems, with emphasis on genetics. This course lays the foundation for understanding the underlying principles of human disease processes across the lifespan. Prerequisite: Admission to Master of Physician Assistant Studies Program. SS.

#### PA 511. Human Physiology & Pathophysiology II. 4 Credits.

Continuation of PA 510. This system-based online course focuses on the physiologic and pathophysiologic functions of the human body from the cellular level, to organ systems. This course lays the foundation for understanding the underlying principles of human disease processes across the lifespan. Prerequisite: Admission to Master of Physician Assistant Studies Program and PA 510. F.

#### PA 512. History and Physical Exam I. 2 Credits.

This online course focuses on patient assessment including communication strategies for interviewing and eliciting a medical history, techniques for performing a basic physical examination, and accurate documentation of patient data. Normal and abnormal findings involving patients across the lifespan are also presented. Instruction in preventive health, behavioral science psychological development is also emphasized. Prerequisite: Admission to Master of Physician Assistant Studies Program. SS.

#### PA 513. History and Physical Exam II. 2 Credits.

Continuation of PA 512. This course is online and concludes with instruction on the UND campus. The course focuses on patient assessment including communication strategies for interviewing and eliciting a medical history, techniques for performing a basic physical examination, and accurate documentation of patient data. Normal and abnormal findings involving patients across the lifespan are also presented. Instruction in preventive health, behavioral science psychological development is also emphasized. Clinical skill labs are utilized to instruct physical examination skills while on campus. Prerequisite: Admission to Master of Physician Assistant Studies Program. F.

#### PA 516. EKG Interpretation. 1 Credit.

This online course focuses on the principles and practical application of electrocardiography for the PA. Prerequisite: Admission to Master of Physician Assistant Studies Program. F.

#### PA 517. Pharmacology I. 2 Credits.

This online system-based course focuses on the pharmacokinetic, pharmacodynamic, and pharmacogenetic concepts of the major drug classes across the lifespan. Federal regulations governing drug development, drug schedules, drug safety and legislation are included. In addition, drug interactions and contraindications and calculation of mathematical equivalents utilized in prescribing medications are reviewed. Prerequisite: Admission to Master of Physician Assistant Studies Program. SS.

#### PA 518. Pharmacology II. 2 Credits.

Continuation of PA 517. This online system-based course focuses on the pharmacokinetic, pharmacodynamic, and pharmacogenetic concepts of the major drug classes across the lifespan. In addition, drug interactions and contraindications and complementary and over the counter medications are discussed. Prerequisite: Admission to Master of Physician Assistant Studies Program and PA 517. F.

#### PA 521. Diagnostic Studies I. 2 Credits.

This online course focuses on laboratory, radiologic, and other diagnostic studies and acceptable values across the lifespan. Components encompass areas of radiology, hematology, chemistry, urinalysis, immunology, genetic and molecular testing and microbiology. Emphasis will include routine and preventative studies and differentiation of normal from abnormal diagnostic findings. Prerequisite: Admission to Master of Physician Assistant Studies Program. F.

#### PA 522. Diagnostic Studies II. 2 Credits.

Continuation of PA 521. This online course focuses on laboratory, radiologic, and other diagnostic studies in relation to disease processes across the lifespan using a system-based approach. Components encompass areas of radiology, hematology, chemistry, urinalysis, immunology, genetic and molecular testing and microbiology. Emphasis on systems such as cardiology, respiratory, and endocrinology that are consistent with the concurrent primary care course content. Emphasis will also include using diagnostic studies to help guide patient care. Prerequisite: Admission to Master of Physician Assistant Studies Program. S.

#### PA 523. Diagnostic Studies III. 2 Credits.

Continuation of PA 522. This online course focuses on laboratory, radiologic and other diagnostic studies in relation to disease processes across the lifespan using a system-based approach. Components encompass areas of radiology, hematology, chemistry, urinalysis, immunology, genetic and molecular testing and microbiology. Emphasis on systems such as neurology, reproduction, and behavioral science that are consistent with the concurrent primary care course content. Emphasis will also include analyzing patient findings and formulating comprehensive diagnostic evaluations for medical management. Prerequisite: Admission to Master of Physician Assistant Studies Program. SS.

#### PA 525. Scholarly Project Development I. 2 Credits.

This online course reviews statistical principles as applied in medical literature with a specific focus on research methods. Implementing principles of evidence-based medicine, students will learn critical appraisal and the value and significance of medical research to determine its application in clinical practice. Students select a topic and complete a project proposal for their scholarly project. Prerequisite: Admission to Master of Physician Assistant Studies Program. SS.

#### PA 526. Scholarly Project Development II. 2 Credits.

This online course allows the student to apply knowledge gained in Scholarly Project Development I. Continued review of medical literature with a critique of study design and statistical methods used are required to complete a review of the literature within their selected topic. Prerequisite: Admission to Master of Physician Assistant Studies Program. F.

#### PA 540. Clinical Medicine: Primary Care I - Didactic. 5 Credits.

This didactic course is held online and on the UND campus. Content is focused on the problem solving process for the diagnosis and management of acute and chronic medical conditions across the life span. Emphasis is placed on analyzing symptoms of disease and formulating differential diagnoses using a system-based approach. Systems such as cardiology, respiratory and endocrinology are included. Pharmacology and pharmacotherapeutics used to treat acute and chronic conditions in system-based areas are included. Simulation and skill labs are utilized to further enhance critical thinking and medical decision making for treatment of patients across the life span. Prerequisite: Admission to Master of Physician Assistant Studies Program. S.

#### PA 541. Clinical Medicine: Primary Care I Clinical. 4 Credits.

This supervised clinical practical experience in a primary care setting allows students to apply communication strategies for interviewing and eliciting a medical history, techniques for performing a basic physical examination, and accurate documentation of patient data. Students will also start to focus on analyzing symptoms of disease, formulating differential diagnoses and treatment plans for patients across the life span. Prerequisite: Admission to Master of Physician Assistant Studies Program. S.



#### PA 550. Clinical Medicine: Primary Care II - Didactic. 5 Credits.

This didactic course is held online and on the UND campus. Content is focused on the problem solving process for the diagnosis and management of acute and chronic medical conditions across the life span. Emphasis is placed on analyzing symptoms of disease and formulating differential diagnoses using a system-based approach. Systems such as neurology, reproduction and behavioral science are included. Pharmacology and pharmacotherapeutics used to treat acute and chronic conditions in system-based areas are included. Emphasis also on managing patients in emergency settings. Simulation and skill labs are utilized to further enhance critical thinking and medical decision making for treatment of patients across the life span. Prerequisite: Admission to Master of Physician Assistant Studies Program. S.

#### PA 551. Clinical Medicine: Primary Care II - Clinical. 4 Credits.

This supervised clinical practice experience in a primary care setting allows students to continue focusing and developing differential diagnoses and treatment plans for patients with complex medical disease across the life span. Prerequisite: Admission to Master of Physician Assistant Studies Program. SS.

#### PA 560. Clinical Medicine: Primary Care III - Didactic. 3 Credits.

This didactic course is held online and on the UND campus. Content is focused on the problem solving process for the diagnosis and management of acute and chronic medical conditions across the life span. Emphasis is placed on analyzing symptoms of disease and formulating differential diagnoses using a system-based approach. Systems such as hematology and conditions such as cancer are included. Pharmacology and pharmacotherapeutics used to treat acute and chronic conditions in system-based areas are included. Emphasis also on managing patients with multiple co-morbidities in emergency, clinical, and surgical settings. Simulation and skill labs are utilized to further enhance critical thinking and medical decision making for treatment of patients across the life span. Prerequisite: Admission to Master of Physician Assistant Studies Program. F.

#### PA 561. Clinical Medicine: Primary Care III - Clinical. 3 Credits.

This supervised clinical practice experience in a primary care setting allows students to continue focusing and developing differential diagnoses and treatment plans for patients with complex medical disease across the life span. Prerequisite: Admission to Master of Physician Assistant Studies Program. F.

#### PA 565. Professional Conduct and Commitment. 1 Credit.

This online course discusses the importance of intellectual honesty, academic integrity, and professional conduct as a student and as a future health care provider. Further topics include the historical development and role of the PA, as well as PA professional organizations. Prerequisite: Admission to Master of Physician Assistant Studies Program. SS.

#### PA 566. Professional Practice I. 1 Credit.

This online course discusses the role of the physician assistant within the healthcare industry. The importance of professionalism as an expression of positive values and ideals demonstrating a high level of responsibility, leadership, ethical practice, and sensitivity to a diverse patient population is also discussed. Prerequisite: Admission to Master of Physician Assistant Studies Program. S.

#### PA 567. Professional Practice II. 1 Credit.

Continuation of PA 566. This online course discusses further levels of professionalism with respect to adherence to legal and regulatory requirements, health care delivery systems and health policy, including rural and underserved populations. Cultural diversity and inclusion principles are also discussed. Prerequisite: Admission to Master of Physician Assistant Studies Program and successful completion of PA 566. SS.

#### PA 568. Professional Practice III. 1 Credit.

Continuation of PA 567. This online course discusses additional aspects of professionalism including commitment to excellence and ongoing professional development. This course will also assist in preparing the student for clinical employment such as writing a cover letter and resume, preparing for an interview, and contract negotiations. Prerequisite: Admission to Master of Physician Assistant Studies Program and successful completion of PA 567. F.

#### PA 569. Professional Practice IV. 1 Credit.

Continuation of PA 568. This online course introduces the PA student to quality of care and reimbursement methods. Students will further understand the importance of patient safety and risk management as well as develop a response to medical ethics. Comprehensive role development will also prepare the student for entry level practice. Prerequisite: Admission to Master of Physician Assistant Studies Program and successful completion of PA 568.

### PA 570. Clinical Medicine - Primary Care Clinical Continuation. 1-3

Continuation - This supervised clinical practice experience in a primary care setting allows students to continue to focus and develop differential diagnoses and treatment plans for patients with complex medical disease across the life span. The course provides flexibility in scheduling experiences to complete the required components of the Masters in Physician Assistant Studies. Prerequisite: Admission to Master of Physician Assistant Studies Program. Repeatable to 7.00 credits. S/U grading. F,S,SS.

#### PA 571. Rural/Underserved Primary Care Clinical. 3 Credits.

This required supervised clinical practice experience in a rural or underserved primary care setting allows students to focus on analyzing symptoms of disease, formulating differential diagnoses and treatment plans for patients across the life span. Caring for rural or underserved patient populations will be the focus of this experience. Prerequisite: Admission to Master of Physician Assistant Studies Program. S/U grading. F,S,SS.

#### PA 580. Specialty Clerkship. 1-10 Credits.

This supervised clinical practical experience is designed to expose the student to different disciplines of medicine to fulfill program requirements as determined by UND faculty advisor, community preceptor and PA student and as necessary for adequate entry-level PA practice. One credit of PA 588 may be substituted for one of the required 10 credits (with prior approval). Prerequisite: Admission to Master of Physician Assistant Studies Program. Repeatable to 6.00 credits. S/U grading. F,S,SS.

#### PA 581. Emergency Department Clerkship. 4 Credits.

This required supervised clinical practical experience focuses on analyzing symptoms and formulating differential diagnoses of emergent and traumatic condition across the life span. This clerkship is intended to provide the student with hands-on experience in the care of patients with urgent and emergent conditions. Prerequisite: Admission to Master of Physician Assistant Studies Program. F,S,SS.

#### PA 582. Surgery Clerkship. 4 Credits.

This required supervised clinical practical experience focuses on analyzing symptoms and formulating differential diagnoses of patients requiring surgical interventions. This clerkship is intended to provide the student with hands-on experience in the care of patients with surgical conditions. Emphasis is placed on the role of the PA in a surgical setting to enhance skills in sterile techniques, surgical assisting, suturing, documentation and pre-post-operative patient care. Prerequisite: Admission to Master of Physician Assistant Studies Program. F,S,SS.

#### PA 583. Hospital Medicine Clerkship. 2 Credits.

This supervised clinical practice experience in the inpatient setting allows students to continue focusing on and developing differential diagnoses and treatment plans for adult and geriatric patients with complex medical diseases. Prerequisite: Admission to Master of Physician Assistant Studies Program.

#### PA 588. Global Health Clerkship. 1 Credit.

Course content elective - This course emphasizes healthcare challenges and opportunities within vulnerable and underserved populations around the world and includes clinical hands-on experience in an international setting. Students will be responsible for any additional costs associated with this course including but not limited to: passports, visas, immunizations, travel, travel and health insurance, room and board, and any other incidental costs incurred during the rotation. One credit of PA 588 may be substituted for one of the credits required in PA 580. Prerequisite: Admission to Master of Physician Assistant Studies Program and approval from the Director of the Physician Assistant Program. S/ U grading. On demand.

#### PA 589. Readings in Physician Assistant Studies. 1-2 Credits.

Course content elective - Selected review and reading of current professional literature in areas pertaining to the practice of a Physician Assistant. In collaboration with the faculty member, reading selection and method of evaluation are determined. Prerequisite: Admission to Master of Physician Assistant Studies Program and approval from the Director of the Physician Assistant Program. Repeatable to 6.00 credits. On demand.

# PA 599. Special Topics in Physician Assistant Studies. 1-2 Credits. Course content elective - A series of clinically relevant lectures, discussions, and/or supervised practice clinical experiences developed around the practice of a Physician Assistant. Prerequisite: Admission to Master of Physician

of a Physician Assistant. Prerequisite: Admission to Master of Physician Assistant Studies Program and approval from the Director of the Physician Assistant Program. Repeatable to 6.00 credits. On demand.



## PA 990. Continuing Enrollment in Physician Assistant Studies. 1-6 Credits.

Course content elective - This course provides additional time, if needed to complete required components of the Masters in Physician Assistant Studies. Repeatable to 12 credits maximum. Prerequisite: Admission to Master of Physician Assistant Studies Program and approval from the Director of the Physician Assistant Program. Repeatable to 12.00 credits. S/U grading. On demand.

#### PA 995. Scholarly Project. 2 Credits.

This online course allows the student to complete the scholarly project. Continued review and critique of the literature related to the topic area are required to formulate and write the final product. Students will also work with their advisor to objectively evaluate the scholarly project outcome. Prerequisite: Admission to Master of Physician Assistant Studies Program. F.

#### PA 996. Continuing Enrollment. 1-12 Credits.

Repeatable. S/U grading.