# PHYSICIAN ASSISTANT STDS (PA) (PA)

# PA 501 Clinical Preceptorship I 4 cr

The student is assigned to a clinical setting to obtain knowledge, skills and attitudinal/behaviors professional components, These competencies are to be obtained while engaging in all aspects of patient care through: the medical interview, history and physical exam, critical thinking, knowledge base, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention measures.

## PA 502 Clinical Preceptorship II 4 cr

The student is assigned to a clinical setting to obtain knowledge, skills and attitudinal/ behavioral professional components. These competencies are to be obtained while engaging in all aspects of patient care through: the medical interview, history, and physical exam, critical thinking, knowledge base, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention measures.

## PA 503 Clinical Preceptorship III 4 cr

The student is assigned to a clinical setting to obtain knowledge, skills and attitudinal/behavioral professional components. These competencies are to be obtained while engaging in all aspects of patient care through: the medical interview, history and physical exam, critical thinking, knowledge base, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention measures.

#### PA 504 Clinical Preceptorship IV 4 cr

The student is assigned to a clinical setting to obtain knowledge, skills, and attitudinal/behavioral professional components. These competencies are to be obtained while engaging in all aspects of patient care through: the medical interview, history and physical exam, critical thinking, knowledge base, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention measures.

# PA 505 Clinical Preceptorship V 4 cr

The student is assigned to a clinical setting to obtain knowledge, skills and attitudinal/behavioral professional components. These competencies are to be obtained while engaging in all aspects of patient care through the medical interview, history and physical exam, critical thinking, knowledge base, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention measures.

#### PA 506 Clinical Preceptorship VI 4 cr

The student is assigned the a clinical setting to obtain knowledge, skills and attitudinal/behavioral professional components. These competencies are to be obtained while engaging in all aspects of patient care through: the medical interview, history and physical exam, critical thinking, knowledge base, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention measures.

## PA 507 Clinical Preceptorship VII 4 cr

The student is assigned to clinical setting to obtain knowledge, skills and attitudinal/behavioral professional components. These competencies are to be blended while engaging all aspects of patient care through medical interview, history and physical exam, critical thinking, knowledge base, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention measures.

## PA 508 Clinical Preceptorship VIII 4 cr

The student will choose from a variety of available elective rotations in order to engage in all aspects of patient care including: the medical interview, history, and physical exam, critical thinking, knowledge base, diagnosis, and treatment plan, patient education, appropriate health maintenance and disease prevention measures. The goal of elective rotations is to provide the student the opportunity to explore area of interest for further employment and increase knowledge in area of weakness.

## PA 509 Clinical Preceptorship IX 4-8 cr

The student will choose from a variety of available elective rotations in order to engage in all aspects of patient care including: the medical interview, history, and physical exam, critical thinking, knowledge base, diagnosis and treatment plan, patient education, appropriate health maintenance and disease prevention measures. The goal of elective rotations is to provide the student the opportunity to explore areas of interest for further employment or increase knowledge in areas of weakness.

#### PA 510 Clinical Medicine I 4 cr

Clinical Medicine I (PA 510) is the introductory course in a four part series covering primary care clinical medicine. It is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course is divided into lecture and lab sections that will be graded separately and will provide opportunities for the student to develop critical thinking skills essential to patient evaluation and management. The use of patient simulations is included. Introductory subject matter covered during this first course will include physical examination skills and use of medical instruments, patient history taking, patient counseling, patient education, interpersonal and communication skills, and epidemiology. Additional topics will include an introduction to behavioral medicine, professionalism, interprofessional education, medical research methods, introduction to medical literature, introduction to laboratory diagnosis and introduction to nutrition. Finally, medical and social topics addressed will include the primary care medical home, rural and medically underserved populations, social determinants of health, healthy people 2020, public health issues and community health.

# PA 510L CM I Lab 1 cr

#### PA 511 Human Gross Anatomy 5 cr

This is a course in gross anatomy of the human body systems utilizing human cadavers and prosections. Emphasis is placed on the relationships between structure and function.

#### PA 512 Physiology 6 cr

Physiology (PA 512) is the scientific basis of medicine. This course will provide the PA student with sufficient in-depth knowledge of cellular and organ physiology necessary for understanding of normal and abnormal human body function and for advancement to courses in pathophysiology, pharmacology, and clinical medicine. This course is divided into six sections which present the basic scientific concepts of human physiology with clinical applications and relevance to disease states: 1) cellular, neuromuscular, autonomic, and cardiac physiology; 2) circulatory physiology; 3) respiratory physiology; 4) renal, electrolyte, and acid-base physiology; 5) gastrointestinal and metabolic physiology; 6) endocrinology.

#### PA 514 Intro to Infectious Disease 1 cr

This course is designed to provide PA students a solid foundation in basic immunology, microbial genetics, structure, nutrition and basic hostparasite relationships. The course will place particular emphasis on the role and application of these subject matters in disease manifestations as well as use/development of diagnostic and treatment modalities. Vulnerability of special populations and interactions between various environmental, social and behavioral factors with the human host in relationship to infection control and treatment will also be emphasized.

## PA 516 Physician Assistant Issues I 2 cr

Physician Assistant (PA) Issues I is the introductory course in a three part Social Science and Public Health Course Series to integrate the social sciences with the clinical and basic sciences. Health and health problems result from a complex interplay of factors: 1) individual healthrelated behaviors, 2) physical environment, 3) health care; access and quality, and 4) social and economic environments. This course will also cover commonly encountered clinical practice issues and their impact on physician assistant practice. Patient education across the lifespan and health education in health care are explored in this course series with community outreach and service learning projects utilizing resources from USA Center for Academic Service-Learning and Civic Engagement. This course requires active student participation in all lectures, discussions, readings, group projects, field exercises, presentations, writing assignments, and other methods of instruction.

#### PA 517 Clinical Preceptorship X 4 cr

The student is assigned to a clinical settings to obtain knowledge, skills and attitudinal/behavioral professional components. These competencies are to be obtained while engaging in all aspects of patient care though: the medical interview, history and physical exam, critical thinking, knowledge based, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention on measures.

#### PA 518 Clinical Preceptorship XI 4-8 cr

The student will choose from a variety of available elective rotations in order to engage in all aspects of patient care including: the medical review, history and physical exam, critical thinking, knowledge base, diagnosis and treatment plan, patient education, appropriate health maintenance and disease prevention measures. The goal of elective rotations is to provide the student the opportunity to explore areas of interest for further employment or increase knowledge in areas of weakness.

## PA 520 Clinical Medicine II 6 cr

Clinical Medicine II (PA 520) is the second course in a four part series covering primary care clinical medicine and surgery topics. It is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course is divided into lecture and lab sections that will be graded separately and will provide opportunities for the student to develop critical thinking skills essential to patient evaluation and management. The use of standardized patients, patient simulations and clinical experiences are included. Topics will include a continuation of physical examination skills, patient history taking, patient counseling, patient education, epidemiology, history of the PA Profession, professionalism, interpersonal and communication skills, interprofessional education, medical research methods, and researching medical literature, the primary care medical home, rural and medically underserved populations, social determinants of health, healthy people 2020, public health issues, and community health care. Specific topics covered in PA 520 include dermatology, ophthalmology, ENT, cardiovascular medicine, EKG, pulmonary medicine, nephrology, and GU medicine. Imbedded in this course will be topics in infectious disease and diagnostic data that will align with the subject matter covered during this semester.

## PA 520L CM II Lab 1 cr

## PA 521 Pathophysiology I 4 cr

Pathophysiology I (PA 521) is the first course in a three-part series that covers the alterations in normal physiology that occur in human disease states. This course will provide the PA student with sufficient in-depth knowledge of pathophysiology necessary for understanding of abnormal human body function and for advancement to subsequent courses in pathophysiology, pharmacology, and clinical medicine. Topics will include an overview of cellular pathophysiology, followed by specific topics that align with the organization of the clinical medicine series: cardiovascular pathophysiology, EKG, pulmonary pathophysiology, and renal/GU pathophysiology.

#### PA 522 Pharmacology I 4 cr

Pharmacology I (PA 522) is the first course in a three-part series that covers the basic scientific concepts of drug classification, mechanism of action, toxicity, and clinical use of drugs. Introductory topics will include the laws and regulations governing the use of pharmaceuticals, prescriptive practices, basic science and properties of drug molecules, drug interactions, and clinical pharmacology of the autonomic nervous system. Specific topics will align with the organization of the clinical medicine series: cardiovascular drugs, pulmonary drugs, drug therapy of renal and genitourinary disease.

# PA 523 Diag Data and Interp I 2 cr

(Previously PA 524) Interpretation of Diagnostic Data and Studies I, will introduce students to basic concepts of laboratory medicine including different methods of sample gathering and transport, basic phlebotomy, interpretation of blood counts and analysis of the differential blood counts, coagulation studies and anticoagulant monitoring, interpretation of metabolic panels, evaluating electrolyte abnormalities, and ordering and interpreting bacterial culture and susceptibilities. The course will focus on and correlate with laboratory assays and procedures taught during Clinical Medicine II. Syllabi and tentative schedules of lectures for the course are attached.

#### PA 524 Interp Diag Data & Studies I 1 cr

Interpretation of Diagnostic Data and Studies I, will introduce students to basic concepts of laboratory medicine including different methods of sample gathering and transport, basic phlebotomy, interpretation of blood counts, and analysis of the differential blood counts, coagulation studies and anticoagulant monitoring, interpretation of metabolic panels, evaluating electrolyte abnormalities, and ordering and interpreting bacterial culture and susceptibilities. The course will focus on and correlate with laboratory assays and procedures taught during Clinical Medicine II.

#### PA 526 Physician Assistant Issues II 2 cr

This course is the second in a three part series covering commonly encountered issues and their impact on physician assistant practice. Introductory subject matter covered during this second course will include social determinants of health affecting diversity and inclusion; cultural competence; workforce shortage; health disparities; health literacy; public health, primary care medicine with a focus on rural and medically underserved medicine, evidence-based medicine, patient belief systems, health care delivery systems, professionalism, interprofessional education and collaboration, social determinants of healthcare, medical ethics, and population/public health. Equally important is the challenge and significance of patient education across the lifespan and health education in health care. This course requires active student participation in all lectures, discussions, readings, group projects, field exercises, presentations writing assignments, and other methods of instruction.

#### PA 530 Clinical Medicine III 6 cr

Clinical Medicine III (PA 530) is the third course in a four part series covering primary care clinical medicine and surgery topics. It is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course is divided into lecture and lab sections that will be graded separately and will provide opportunities for the student to develop critical thinking skills essential to patient evaluation and management. The use of standardized patients, patient simulations and clinical experiences are included. Topics will include a continuation of complete and focused physical examination skills, patient history taking, patient counseling, patient education, epidemiology, normal and abnormal development, history of the PA Profession, professionalism, interpersonal and communication skills, interprofessional education, medical research methods, and researching medical literature, the primary care medical home, rural and medically underserved populations, social determinants of health, healthy people 2020, public health issues, and community health care. Specific topics covered in PA 530 include neurology, rheumatology, hematology/oncology, orthopedic medicine, gastrointestinal medicine, and psychiatric/behavioral medicine. Included in this course will be topics in infectious disease and diagnostic data that will align with the subject matter covered during this semester.

## PA 530L CM III Lab 1 cr

## PA 531 Pathophysiology II 4 cr

Pathophysiology II (PA 531) is the second course in a three-part series that covers the alterations in normal physiology that occur in human disease states. This course will provide the PA student with sufficient in-depth knowledge of pathophysiology necessary for the understanding of abnormal human body function and for advancement to subsequent courses in pathophysiology, pharmacology, and clinical medicine. Topics will align with the subject matter in Clinical Medicine II (PA 530): neurology, rheumatology, endocrinology, hematology, oncology, gastrointestinal, and psychiatric disorders.

#### PA 532 Pharmacology II 4 cr

This course is the second of a proposed three part pharmacology series that used to be taught in two sections during the spring and summer semesters as PA 532 and PA 542. The course will continue to cover the basic scientific concepts of drug classification, mechanism of action, toxicity, and clinical use of drugs. Other topics will include drug interaction and the properties of drug molecules. Specific topics will align with the organization of the clinical medicine series.

#### PA 533 Diag Data & Interp II 2 cr

Interpretation of Diagnostic Data and Studies II, will focus on ordering and interpretation of laboratory tests and imaging studies associated with diseases of the urinary tract system including basic and advanced urinalysis and their interpretation, laboratory tests and imaging studies associated with diseases of the gastrointestinal tract to include liver, pancreas, small intestine and colorectal regions, basic and advanced immunohematology and imaging to investigate autoimmune disorders, and advanced genetic testing and procedures. This course will advance the students knowledge of laboratory medicine and will focus on those laboratory assays relevant to the topic covered in Clinical Medicine III.

#### PA 536 Physician Assistant Issues III 2 cr

Issues in Healthcare and Population Health is a class that intends to instruct students on the many faces of health care. Healthcare involves different people who have different roles in the patient's healthcare experience. The goal is for the student to gain a deeper understanding of the many aspects of practicing medicine. Issues in Healthcare and Population Health IV (PA 536) is the last in a three part series covering commonly encountered issues and their impact on physician assistant practice. This series is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course will utilize a variety of teaching strategies getting the student involved in the learning process.

#### PA 540 Clinical Medicine IV 7 cr

Clinical Medicine IV (PA 540) is the final course in a four part series covering primary care clinical medicine and surgery topics. It is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course is divided into lecture and lab sections that will be graded separately and will provide opportunities for the student to develop critical thinking skills essential to patient evaluation and management. The use of standardized patients, patient simulations and clinical experiences are included. Topics will include a continuation of complete and focused physical examination skills, patient history taking, patient counseling, patient education, interpersonal and communication skills, epidemiology, normal and abnormal development, history of the PA Profession, professionalism, interprofessional education, medical research methods, and researching medical literature, the primary care medical home, rural and medically underserved populations, social determinants of health, healthy people 2020, public health issues, and community health care. Specific topics covered in PA 540 include geriatric medicine, pediatric medicine, surgery, OB/GYN medicine, emergency medicine, ACLS, and clinical year transition. Included in this course will be topics in infectious disease and diagnostic data that will align with the subject matter covered during this semester.

#### PA 540L CM IV Lab 1 cr

#### PA 541 Pathophysiology III 3 cr

This course is the third of three sections of pathophysiology that used to be taught during the fall semester as a single course PA 523. The course will provide students with an understanding of abnormal body functions including an overview of cellular pathophysiology followed by specific topics that align with the organization of the clinical medicine series.

## PA 542 Pharmacology III 3 cr

This course is the third of a proposed three part pharmacology series that used to be taught in two sections during the spring and summer semesters as PA 532 and PA 542. The course will continue to cover the basic scientific concepts of drug classification, mechanism of action, toxicity, clinical use of drugs, drug interaction and the properties of drug molecules. Specific topics will align with the organization of the clinical medicine series.

#### PA 544 Diagn Data and Interp III 2 cr

(Previously PA 541) Interpretation of Diagnostic Data and Studies III, will introduce students to basic radiology concepts by teaching fundamentals of radiology, basic imaging techniques (ultrasound, vascular imaging, advanced imaging techniques (CT Scan and MRI with and without contrast), and PET scan. The course will hone student knowledge of all diagnostic modalities through intensive case-based approach to the interpretation of laboratory assays.

#### PA 595 Summative Evaluation 4 cr

PA 595 is designed to evaluate student learning at the end of the 27 month PA training program. The assessments used in this course will help determine the level at which students achieved the expectations for their learning as prescribed and to identify instructional areas that may need additional attention. The summative assessments include: 1) comprehensive examination, 2) OSCE with standardized patient, 3) on-line board review and 4) Capstone Project. A comprehensive written examination will be administered as a final evaluation of the student's progress. This test is also designed to prepare the graduate for the NCCPA exam.