

PHYSICIAN ASSISTANT STUDIES (PAS)

Course Descriptions

PAS/PTS/BIO 511 Cr. 6

Human Gross Anatomy

A comprehensive consideration of the human anatomy including both neuro-musculoskeletal components and internal organ systems. Systems included are musculoskeletal, neurological, urogenital, gastrointestinal, and cardiopulmonary. The course uses computer based demonstrations to provide an enhanced appreciation of human anatomy. Biomechanical function, topographic correlations, and clinical applications are emphasized. Provides an in-depth understanding of the gross anatomy of the human body through lecture, audiovisual presentations and computer based exercises. Prerequisite: Admission to the PAS program or permission of instructor. (Cross-listed with BIO 511 and PTS 511; may only earn credit in PAS, BIO or PTS). Offered Summer Session.

PAS 622 Cr. 1

Neuroanatomy

This course provides the student an understanding of the structure, organization and function of the central, peripheral and autonomic nervous systems including the vascular supply to each of these components. This provides the basis for appreciating the anatomical basis of more common neurologic disorders and neurologic testing. Cadaveric specimens are used in the laboratory. Prerequisite: Admission to the PAS program and approval of the program director. Offered Sem. II.

PAS 624 Cr. 2

Medical Biochemistry

A study of chemical processes in cells (i.e., enzymes, lipids, membranes, metabolism, nucleic acids, receptor-sites, etc.) with special emphasis on building a foundation for the study of methods for diagnosis and treatment of human diseases and disorders. Prerequisite: Admission to the PAS program. Offered Summer Session.

PAS 626 Cr. 4

Medical Physiology

An advanced study of the physiology of human organ systems focusing on topics that provide the basis for understanding disease and pharmacotherapeutic mechanisms. Prerequisite: Admission to the PAS program. May not earn credit for PAS 626 and BIO 718/719. Offered Summer Session.

PAS 628 Cr. 2

Clinical Infectious Disease

This course introduces the principles of infectious diseases and the characteristics of the important pathogens. The discussion will focus on the clinical aspects of each infectious disease building on previous knowledge of microbiology. Includes a survey of microorganisms that commonly infect humans including bacteria, fungi, viruses, and parasites. The immune system role in preventing and treating infectious diseases will also be discussed. Prerequisite: Admission to the PAS program and approval of the program director. Offered Sem. I.

PAS 630 Cr. 4**Medical Pharmacology**

This course presents a broad survey of the general principles of pharmacology. Included are the principles of pharmacokinetics and pharmacodynamics, the mechanisms of action, toxicities and interactions of specific drugs and drug groups, and an introduction to medical therapeutics. The physiologic basis and clinical application pharmacologic agents is also be discussed.

Prerequisite: Admission to the PAS program and approval of the program director. Offered Sem. I.

PAS 640 Cr. 2**Introduction to the Physician Assistant Profession**

This course provides an overview of the PA profession, its history, current role in health care and other issues of professional interest. Students also develop patient interview and communication skills. Concepts of professionalism and professional ethics as a PA student and graduate physician assistant are introduced. Prerequisite: Admission to the PAS program. Offered Summer Session.

PAS 642 Cr. 5**Medical History and Physical Exam**

The elements of a comprehensive medical history and physical exam are presented and students practice these techniques in the teaching lab and in the clinical setting. EKG interpretation is also presented. Prerequisite: Lect. 4, Lab 3. Admission to the PAS program and approval of the program director. Offered Sem. I

PAS 644 Cr. 1**The Clinical Patient Examination**

This course prepares PA students for sensitive portions of the complete clinical examination of patients. Necessary skills are presented in lecture, and then demonstrated using plastic models. Students then practice these skills with professional patients. Lect. 3, Lab 4. Prerequisite: Admission to the PAS program and approval of the program director. Offered J-Term.

PAS 646 Cr. 1**Law, Medicine and Ethics**

Legal and regulatory aspects of medical care as a physician assistant are explored. Issues of the ethical practice of medicine are also explored. Prerequisite: Admission to the PAS program and approval of the program director. Offered Sem. II.

PAS 648 Cr. 1**Health Care Systems and Administration**

This course provides the student an introduction to the current healthcare and reimbursement systems in America, their operation and impact on community health and medical practice. Prerequisite: Admission to the PAS program and approval of the program director. Offered J-Term.

PAS 650 Cr. 6**Clinical Diagnosis and Reasoning**

This course brings together the knowledge and skills developed previously in the program to perform the comprehensive history and physical examination and a more limited episodic examination. Clinical critical thinking becomes an integral part of performing the examination through the development of a differential diagnosis and appropriate diagnostic strategies. Also includes presentation of behavioral and social concepts in medicine including personality development, normative responses to stress, psychosomatic manifestations of illness, sexuality, basic counseling skills, emotional problems of daily living. Lect. 4, Lab 2. Prerequisite: Admission to the PAS program and approval of the program director. Offered Sem. II.

PAS 652 Cr. 2**Clinical Procedures**

Developing a variety of clinical procedural skills such as starting IV lines, drawing blood, giving injections and Advanced Cardiac Life Support. Students learn various surgical protocols and procedures and other standard hospital procedures such as suturing and casting. Lect. 8, Lab 16. Prerequisite: Admission to the PAS program and approval of the program director. Pass/Fail grading. Offered Summer Session.

PAS 654 Cr. 2**Clinical Epidemiology**

This course presents concepts of epidemiology and biostatistics as applied to the interpretation of the medical literature. A systematic process for identifying published literature relevant to clinical practice and evaluating its quality and applicability to the clinical situation is presented. Students then identify, review and critique published research appropriate to their clinical practice setting. Prerequisite: Admission to the PAS program and approval of the program director. Offered Sem. I.

PAS 702 Cr. 6**General Pathology and Internal Medicine I: Cardiology, Pulmonology, Hematology, Gastroenterology, Allergy, and Dermatology**

The general principles of pathology, including cell injury, inflammation, healing, neoplasia, genetic and developmental pathology and immunopathology are presented as a foundation for the study of medicine. Internal medicine in this course integrates presentation of the pathophysiology, clinical diagnosis and management of a spectrum of disorders in cardiology, pulmonology, hematology, gastroenterology, allergy and dermatology. Issues related to nutrition and radiographic imaging in these medical disciplines are also presented. The course is designed to allow PA students to develop critical clinical reasoning skills, and an advanced understanding of these disease processes and their treatment. Prerequisite: Admission to the PAS program and approval of the program director. Offered Sem. I.

PAS 704 Cr. 1**Internal Medicine 2: Endocrinology**

This course integrates presentation of the pathophysiology, clinical diagnosis and management of a spectrum of disorders in endocrinology. Issues related to nutrition and radiographic imaging in endocrinology also are presented. The course is designed to allow PA students to develop critical clinical reasoning skills, and an advanced understanding of these disease processes and their

treatment. Prerequisite: Admission to the PAS program and approval of the program director. Offered J Term.

PAS 706 Cr. 3

Obstetrics, Gynecology and Pediatrics

This course integrates presentation of the pathophysiology, clinical diagnosis and management of a spectrum of disorders in obstetrics, gynecology and pediatrics along with the wellness care and disease prevention. Issues related to nutrition and radiographic imaging in these medical disciplines also are presented. The course is designed to allow PA students to develop critical clinical reasoning skills, and an advanced understanding of these disease processes and their treatment. Prerequisite: Admission to the PAS program and approval of the program director. Offered Sem. II.

PAS 708 Cr. 6

Surgical Medicine: Anesthesia, General Surgery, Otorhinolaryngology, Ophthalmology, Orthopedic Surgery, Dermatology, Urology/Renal

This course integrates presentation of the pathophysiology, clinical diagnosis and management of a spectrum of disorders in anesthesia, general surgery, otorhinolaryngology, ophthalmology, orthopedic surgery, dermatology, urology/renal. Issues related to nutrition and radiographic imaging in these medical disciplines also are presented. The course is designed to allow PA students to develop the critical clinical reasoning skills, and an advanced understanding of these disease processes and their treatment. Prerequisite: Admission to the PAS program and approval of the program director. Offered Sem. II.

PAS 710 Cr. 3

Internal Medicine 3: Oncology, Rheumatology, Neurology and Psychiatry

This course integrates presentation of the pathophysiology, clinical diagnosis and management of a spectrum of disorders in oncology, rheumatology, neurology, and psychiatry. Issues related to nutrition and radiographic imaging in these medical disciplines are also presented. The course is designed to allow PA students to develop critical clinical reasoning skills, and an advanced understanding of these disease processes and their treatment. Prerequisite: Admission to the PAS program and approval of the program director. Offered Sem. II.

Clinical Year Rotations and Courses

PAS 720 Cr. 4

Family Medicine Rotation I

This 4-week rotation provides students with clinical experience in broad, primary care setting during which students refine their skills in performing the history and physical exam, ordering and interpreting diagnostic tests, and developing treatment plans for the diversity of patients in a typical family medicine practice. Where possible, students participate in grand rounds, noon conferences and other clinically relevant didactic presentations. A set of cognitive objectives guides student reading in preparation for a written examination at the end of the rotation.

Prerequisite: Admission to the PAS program and approval of the program director.

PAS 722 Cr. 4**Internal Medicine Rotation I**

This 4-week rotation provides students with clinical experience in an inpatient internal medicine setting during which students refine their skills in performing the history and physical exam, ordering and interpreting diagnostic tests, and developing treatment plans for the diversity of patients in a typical internal medicine hospital practice. Where possible, students participate in grand rounds, noon conferences and other clinically relevant didactic presentations. A set of cognitive objectives guides student reading in preparation for a written examination at the end of the rotation. Prerequisite: Admission to the PAS program and approval of the program director.

PAS 724 Cr. 4**General Surgery Rotation**

This 4-week rotation provides students with clinical experience in a general surgery setting during which students refine their skills in performing the history and physical exam, ordering and interpreting diagnostic tests, assisting with surgery and developing treatment plans for the diversity of patients in a typical general surgery practice. Where possible, students participate in grand rounds, noon conferences and other clinically relevant didactic presentations. A set of cognitive objectives guides student reading in preparation for a written examination at the end of the rotation. Prerequisite: Admission to the PAS program and approval of the program director.

PAS 726 Cr. 4**Obstetrics and Gynecology Rotation**

This 4-week rotation provides students with clinical experience in an obstetrics and gynecology setting during which students refine their skills in performing the history and physical exam, ordering and interpreting diagnostic tests, assisting with deliveries and gynecologic surgery, and developing treatment plans for the diversity of patients in a typical ob/gyn practice. Where possible, students participate in grand rounds, noon conferences and other clinically relevant didactic presentations. A set of cognitive objectives guides student reading in preparation for a written examination at the end of the rotation. Prerequisite: Admission to the PAS program and approval of the program director.

PAS 728 Cr. 4**Pediatric Rotation**

This 4-week rotation provides students with clinical experience in a pediatric setting during which students refine their skills in performing the history and physical exam, ordering and interpreting diagnostic tests, and developing treatment plans for the diversity of patients in a typical pediatric practice. Where possible, students participate in grand rounds, noon conferences and other clinically relevant didactic presentations. A set of cognitive objectives guides student reading in preparation for a written examination at the end of the rotation. Prerequisite: Admission to the PAS program and approval of the program director.

PAS 730 Cr. 4**Psychiatry Rotation**

This 4-week rotation provides students with clinical experience in a psychiatry setting during which students refine their skills in performing the history and physical exam, ordering and interpreting diagnostic tests, and developing treatment plans for the diversity of patients in a typical psychiatric practice. Where possible, students participate in grand rounds, noon conferences

and other clinically relevant didactic presentations. A set of cognitive objectives guides student reading in preparation for a written examination at the end of the rotation. Prerequisite: Admission to the PAS program and approval of the program director.

PAS 732 Cr. 4

Emergency Medicine Rotation

This 4-week rotation provides students with clinical experience in an emergency medicine setting during which students refine their skills in performing the history and physical exam, ordering and interpreting diagnostic tests, and developing treatment plans for the diversity of patients in a typical emergency medicine practice. Where possible, students participate in grand rounds, noon conferences and other clinically relevant didactic presentations. A set of cognitive objectives guides student reading in preparation for a written examinations at the end of the rotation. Admission to the PAS program and approval of the program director.

PAS 740 Cr. 4

Dermatology Rotation

This 4-week rotation provides students with clinical experience in a dermatology setting during which students refine their skills in performing the history and physical exam, ordering and interpreting diagnostic tests, and developing treatment plans for the diversity of patients in a typical dermatology practice. Where possible, students participate in grand rounds, noon conferences and other clinically relevant didactic presentations. A set of cognitive objectives guides student reading in preparation for a written examination at the end of the rotation. Prerequisite: Admission to the PAS program and approval of the program director.

PAS 742 Cr. 4

Family Medicine Rotation 2

This 4-week rotation provides students with a more in-depth clinical experience in a broad, primary care setting during which students refine their skills in performing the history and physical exam, ordering and interpreting diagnostic tests, and developing treatment plans for the diversity of patients in a typical family medicine practice. Where possible, students participate in grand rounds, noon conferences and other clinically relevant didactic presentations. A set of cognitive objectives guides student reading in preparation for a written examination at the end of the rotation. Prerequisite: Admission to the PAS program and approval of the program director.

PAS 744 Cr. 4

Internal Medicine Rotation 2

This 4-week rotation provides students with a more in depth clinical experience in an inpatient internal medicine setting during which students refine their skills in performing the history and physical exam, ordering and interpreting diagnostic tests, and developing treatment plans for the diversity of patients in a typical internal medicine hospital practice. Where possible, students participate in grand rounds, noon conferences and other clinically relevant didactic presentations. A set of cognitive objectives guides student reading in preparation for a written examination at the end of the rotation. Prerequisite: Admission to the PAS program and approval of the program director.

PAS 746 Cr. 4**Orthopedic Surgery Rotation**

This 4-week rotation provides students with clinical experience in an orthopedic surgery setting during which students refine their skills in performing the history and physical exam, ordering and interpreting diagnostic tests, assisting in surgery and developing treatment plans for the diversity of patients in a typical orthopedic surgery practice. Where possible, students participate in grand rounds, noon conferences and other clinically relevant didactic presentations. A set of cognitive objectives guides student reading in preparation for a written examination at the end of the rotation. Prerequisite: Admission to the PAS program and approval of the program director.

PAS 750 Cr. 4**Elective Clinical Rotation**

The student selects a clinical area for the elective clinical rotation(s) with the approval of program faculty. Students may select elective experiences from specialty areas not included in the required rotations, or in one of the required clinical areas. With the consultation and approval of program faculty the student develops an individualized learning contract that includes objectives for the rotations and a method to demonstrate achievement of these objectives at the conclusion of the rotation. Where possible and appropriate, students participate in grand rounds, noon conferences and other clinically relevant didactic presentations. Prerequisite: Admission to the PAS program and approval of the program director. Repeatable for credit Maximum 8 credits. Pass/Fail grading.

PAS 790 Cr. 2**Capstone Seminar 1**

This course, the first of three capstone seminars, occurs during the clinical year and works to develop skills important to professional physician assistant practice. This seminar series includes clinical case presentation, clinical documentation, prescription writing and medication ordering, the interpretation of the medical literature to answer clinical questions and the systematic review of the medical literature. Prerequisite: Admission to the PAS program and approval of the program director. Offered Summer Session.

PAS 792 Cr. 2**Capstone Seminar 2**

This course, the second of three capstone seminars, occurs during the clinical year and works to develop skills important to professional physician assistant practice. This seminar series includes topics in continuous quality management, completing a systematic qualitative review of the medical literature, diagnostic and procedural coding and resume preparation. Prerequisite: Admission to the PAS program and approval of the program director. Offered Sem I.

PAS 794 Cr. 2**Capstone Seminar 3**

This course, the third of three capstone seminars, occurs during the clinical year and works to develop skills important to professional physician assistant practice. This seminar series includes completion and presentation of a systematic qualitative review of a topic in the medical literature, presentation of practice regulations, and completion of the program's summative evaluation. Prerequisite: Admission to the PAS program and approval of the program director. Offered Sem II.