

# **Course Descriptions**

### PHAS 5101 Studies in the PA Profession

This course includes instruction about the PA profession, historical development, and current trends. PA licensure, credentialing, laws and regulations regarding professional practice, patient safety, quality improvement, prevention of medical errors, and risk management are introduced topics in this course. In addition to the PA practice, students will receive instruction in the roles and responsibilities of various health care professionals, emphasizing the team approach to patient centered care beyond the traditional physician-PA team approach. Prerequisite: Admission into the Physician Assistant Studies Program.

# PHAS 5102 Introduction to Clinical Reasoning

This course introduces the fundamentals, philosophy, and theory of clinical reasoning in healthcare. Students will be taught problem-solving techniques and clinical reasoning skills to successfully manage patients across a lifespan. Prerequisite: Admission into the Physician Assistant Studies Program.

# PHAS 5103 Clinical Reasoning I

This course is a continuation of PHAS 5102, Introduction to Clinical Reasoning. Students will apply clinical reasoning, problem-solving, and medical decision-making skills to work through a variety of patient cases. A combination of problem-based learning and team-based learning will be utilized in this course. Students will collaborate to formulate differential diagnoses, and a primary/working diagnosis, and develop effective management plans. Case study topics are aligned with the PHAS 5401 Clinical Medicine I course. Prerequisite: Admission into the Physician Assistant Studies Program.

#### PHAS 5104 Clinical Reasoning II

This course is a continuation of PHAS 5103, Clinical Reasoning I. Students will apply clinical reasoning, problem-solving, and medical decision-making skills to work through a variety of patient cases. A combination of problem-based learning and team-based learning will be utilized in this course. Students will collaborate to formulate differential diagnoses, and a primary/working diagnosis, and develop effective management plans. Case study topics are aligned with the PHAS 5402 Clinical Medicine II course. Prerequisite: Admission into the Physician Assistant Studies Program.

### PHAS 5105 Clinical Reasoning III

This course is a continuation of PHAS 5104, Clinical Reasoning II. Students will apply clinical reasoning, problem-solving, and medical decision-making skills to work through a variety of patient cases. A combination of problem-based learning and team-based learning will be utilized in this course. Students will work collaboratively to formulate differential diagnoses, and a primary/working diagnosis, and develop effective management plans. Case study topics are aligned with the PHAS 5403Clinical Medicine III course. Prerequisite: Admission into the Physician Assistant Studies Program.

### PHAS 5107 Introduction to Pharmacology

This course is an introduction to pharmacology, pharmacodynamics, and pharmacokinetics. Topics include pharmacodynamics, drug-receptor interactions, agonist/antagonist, desensitization, tolerance, drug absorption/distribution, drug metabolism, elimination/clearance, drug administration, and dosing regimens used in clinical practice for patients across the lifespan. Prerequisite: Admission into the Physician Assistant Studies Program.

# PHAS 5112 Health Policy and Health Management

This course will survey the U.S. health care delivery system and review the economic and policy issues that face our system. Particular focus will be on those issues that directly affect the practicing physician assistant. The student will undertake an in-depth review of managed care, reimbursement and other economic/financial issues and policies. Prerequisite: Admission to the Physician Assistant Studies Program.

#### PHAS 5114 Research & Statistical Methods in Health

This course will provide instruction to prepare students to search, interpret and evaluate the medical literature with the application to individualized patient care. Topics include fundamentals of research, sampling methods, and interpretation of basic biostatistical methods. The use of common medical databases to access medical literature is also included in this course. Prerequisite: Admission into the Physician Assistant Studies Program.

### PHAS 5116 Electrocardiography Seminar

This seminar covers implementation and interpretation of electrocardiograms (ECG). The ECG interpretation section provides students with a systematic method of interpreting a 12-lead ECG with respect to rate, rhythm and blocks, electrical axis determination, hypertrophy, ischemia, injury, infarction, and miscellaneous drug, electrolyte, disease, and pacemaker effects. Prerequisite: Admission into the Physician Assistant Studies Program.

# PHAS 5118 Legal & Ethical Issues in Health Care

Explores medical jurisprudence and licensing. Students will be introduced to the dynamics of the legal system, moral problems in health care, and the impact of both on professional and institutional interactions with patients. Students will be given opportunity to demonstrate 1) an understanding of ethical principles and legal factors which impinge upon health care, 2) the ability to apply ethical and legal concepts to the analysis of the roles and responsibilities of the health professional. Prerequisite Admission into the Physician Assistant Studies Program.

#### PHAS 5119 Clinical Lab Methods

This course introduces the student to the medical laboratory and its role in medicine. Emphasis is placed on appropriate laboratory studies used for specific diseases, normal and abnormal laboratory values, and procedures for obtaining samples. Prerequisite: Admission into the Physician Assistant Studies Program.

#### PHAS 5133 Patient Encounter I

This course is the first in a three-course series. It provides students with an introduction to the basic principles of medical history-taking and documentation of patient information, confidentiality, and cultural competence. Basic principles of presentation of subjective and objective findings in professional healthcare settings are introduced. Incremental course content builds a foundation for the development of clinical reasoning skills necessary to formulate differential diagnoses. Prerequisite: Admission into the Physician Assistant Studies Program.

#### PHAS 5162 Clinical Imaging

This course provides an overview of commonly utilized diagnostic clinical imaging tools based on current professional practices. Students will learn the appropriate application and interpretation of diagnostic and imaging tests related to diseases and illnesses. Ultrasonography utilization, application, and interpretation will be taught in this section. Students will apply problem-solving and medical decision-making skills when

selecting and interpreting clinical imaging and diagnostic studies used in the medical setting. Prerequisite: Admission into the Physician Assistant Studies Program.

### PHAS 5200 Genetics & Pathophysiology of Health and Disease

This course is designed to provide a baseline level of biomedical science knowledge upon which to build during the study of health and human diseases. This course includes instruction in the following areas of applied medical sciences and their application in clinical practice: biochemistry, immunology, microbiology, infectious diseases, genetics, and molecular mechanisms of health and disease. Prerequisite: Admission into the Physician Assistant Studies Program.

### PHAS 5240 Psychiatry-Social and Behavioral Sciences

This course is designed to provide the students with an overview of normal and abnormal characteristics of human psychological development and behavior. This social and behavioral science course includes the detection and treatment of substance abuse; human sexuality; issues of death, dying, and loss; response to illness, injury, and stress; principles of violence identification and prevention; and psychiatric/behavioral conditions. The course will provide skills needed for the clinical evaluation and assessment of children, adolescent, adult, and elderly populations with psychiatric/behavioral conditions and disorders. Instruction in this course will prepare students to provide preventative, emergent, acute, chronic, rehabilitative, palliative, and end-of-life care for patients with psychiatric disorders. Prerequisite: Admission into the Physician Assistant Studies Program.

# PHAS 5237 Preventive Medicine & Community Health

Examines the bio-demographics of disease in the United States. Emphasis is on prevention from the perspective of the primary health care provider. Encourages community involvement. Discussions focused on the prevention of disease. Special attention is given to the local medical practices and beliefs of the Rio Grande Valley and Texas-Mexico border region. Guest lectures include topics in rural and indigent health, community outreach, communicable disease awareness and prevention, sexual health, and folk and alternative medicine. Prerequisite: Admission into the Physician Assistant Studies Program.

### PHAS 5262 Clinical Clerkship

This course covers the indications, contraindications, step-by-step procedures, and potential complications of multiple hands-on skills that are commonly performed by physician assistants in clinical practice. Prerequisite: Admission into the Physician Assistant Studies Program.

### PHAS 5306 Medical Physiology & Pathophysiology I

This course is the first in a three-course series. It reviews the basic physiologic regulatory mechanisms responsible for maintenance of homeostasis in the normal human and introduces the pathophysiologic alterations which occur in these mechanisms leading to specific disease processes. It also presents a molecular and genetic basis for disease. Clinical correlations support concurrent modular coursework involving the diagnosis and treatment of disease. Prerequisite: Admission into the Physician Assistant Studies Program.

# PHAS 5307 Medical Physiology & Pathophysiology II

This course is the second in a three-course series. Clinical correlations support concurrent modular coursework involving the diagnosis and treatment of disease. This course is a continuation of PHAS 5306, Medical Physiology and Pathophysiology I. Prerequisite: Admission into the Physician Assistant Studies Program.

# PHAS 5309 Medical Physiology & Pathophysiology III

This course is the third in a three-course series. Clinical correlations support concurrent modular coursework involving the diagnosis and treatment of disease. This course is a continuation of PHAS 5307, Medical Physiology and Pathophysiology II. Prerequisite: Admission into the Physician Assistant Studies Program.

# PHAS 5328 Pharmacology I

This course is the first in a three-course series. It 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 characteristics of disease states relative to pharmacologic therapy will also be discussed. The objective of the course is to lay the cognitive foundation in pharmacology and therapeutics that can be refined and applied in clinical practice. Promotes the ability to recognize untoward side effects of medications. It enables the student to calculate dosages, write prescriptions, discuss pharmacokinetics, and determine the appropriate medication for a particular disease. Emphasis is placed on the pharmacotherapeutics of disease. Prerequisite: Admission into the Physician Assistant Studies Program.

# PHAS 5329 Pharmacology II

This course is the second in a three-course series. Clinical correlations support concurrent modular coursework involving the diagnosis and treatment of disease. This course is a continuation of PHAS 5328, Pharmacology I. Prerequisite: Admission into the Physician Assistant Studies Program.

# PHAS 5330 Pharmacology III

This course is the third in a three-course series. Clinical correlations support concurrent modular coursework involving the diagnosis and treatment of disease. This course is a continuation of PHAS 5329, Pharmacology II. Prerequisite: Admission into the Physician Assistant Studies Program.

### PHAS 5334 Patient Encounter II

This course is the second in a three-course series. It provides students with an introduction to normal physical examination in a systematic approach and appropriate use of medical equipment. This course emphasizes skill development. The laboratory setting employs opportunities to practice the application of skills and techniques. Students are assessed using written, verbal, and practical exercises. Prerequisite: Admission into the Physician Assistant Studies Program.

### PHAS 5335 Patient Encounter III

This course is the third in a three-course series. It provides the students with exposure to advanced physical examination techniques and documentation of findings. The laboratory setting employs opportunities to practice the application of skills and techniques. Students are assessed using written, verbal, and practical exercises. Prerequisite: Admission into the Physician Assistant Studies Program.

#### PHAS 5400 Clinical Anatomy

This course provides students with a comprehensive and advanced review of gross anatomy using a regional systematic approach to the human body. Basic and advanced radiographic interpretation is correlated with anatomical structure. The lecture and laboratory components of this course emphasize the clinical relevance of each area considered. Human cadavers and computer-assisted learning modules are utilized in the laboratory setting. Clinical correlations support concurrent modular coursework involving the diagnosis and treatment of disease. Prerequisite: Admission into the Physician Assistant Studies Program.

### PHAS 5401 Clinical Medicine I

This is the first of three didactic clinical medicine courses. The course will concentrate on the etiology, pathophysiology, clinical presentation, diagnosis, treatment, management and prevention of disease across the human life span; organized into an organ system modular approach. The course will also provide opportunity for students to demonstrate, in preparation for the major clinical year, the ability to work collaboratively, to apply their knowledge and solve clinical problems. Instructional methods include lectures to provide the core knowledge, case-based small group discussions, team-based learning exercises, and independent readings. The course structure and content is closely related and aligned to the concurrent courses in the curriculum. Problem solving and medical decision-making skills will be emphasized. Prerequisite: Admission into the Physician Assistant Studies Program.

# PHAS 5402 Clinical Medicine II

This is the second of three didactic clinical medicine courses. This course is a continuation of PHAS 5401, Clinical Medicine I. Prerequisite: Admission into the Physician Assistant Studies Program.

#### PHAS 5403 Clinical Medicine III

This is the third of three didactic clinical medicine courses. This course is a continuation of PHAS 5402, Clinical Medicine II. Prerequisite: Admission into the Physician Assistant Studies Program.

### PHAS 6431 Pediatric Rotation

This core clinical rotation provides students with exposure to the principles and practice of pediatric medicine. This supervised clinical practice experience enables students to assess neonates, infants, children, and adolescent patients seeking medical care in the pediatric medical setting. This rotation is intended to provide the opportunity to refine techniques of history-taking and physical examination specific to the pediatric population. This rotation aims to expose students to illnesses and injuries that are unique to the pediatric patient. This clinical rotation will enable the student to provide care as an entry level physician assistant upon graduation. Prerequisite: Successful completion of the didactic PHAS professional curriculum.

#### PHAS 6433 Women's Health

This core clinical rotation provides students with exposure to the principles and practice of women's health, obstetrics, and gynecology. This core rotation provides students with experience in managing common women s health prevention and diseases. This clinical rotation enables students to assess adolescent, adult, and elderly female patients seeking medical care with an emphasis on menarche, family planning, childbearing, peri-menopause, menopause and post-menopause. Prevention, recognition, and treatment of prenatal, gynecologic care, sexually transmitted diseases, and cancers will also be addressed. This clinical rotation will enable the students to provide care as an entry level physician assistant upon graduation. Prerequisite: Successful completion of the didactic PHAS professional curriculum.

#### PHAS 6435 Surgery Rotation

This core clinical rotation provides students with exposure to the principles and practice of surgery. This supervised clinical practice experience enables students to assess patients seeking medical care across the life span with an emphasis on caring for adults and elderly patients with surgically manageable diseases in the operating room and outpatient setting. Emphasis of learning is on the pre-operative evaluation and preparation of the patients for surgery; assisting during the intra-operative period; and the post-operative care of surgical wounds. This clinical experience will enable the student to provide care as an entry level physician assistant upon graduation. Prerequisite: Successful completion of the didactic PHAS professional curriculum.

### PHAS 6440 Family Medicine

This core clinical rotation provides students with exposure to the principles and practice of family medicine. This supervised clinical practice experience enables students to assess patients seeking medical care across the life span with an emphasis on caring for the acutely and chronically ill infant, child, adolescent, adult, and elderly patients in an outpatient medical setting. Students will develop the skills necessary to evaluate, monitor, and manage health problems encountered in family medicine. Emphasis is on disease prevention and health maintenance. This clinical experience will enable the student to provide care as an entry level physician assistant upon graduation.

#### PHAS 6441 Internal Medicine

This core clinical rotation provides students with exposure to the principles and practice of internal medicine. This supervised clinical practice experience enables students to assess patients seeking medical care across the life span with an emphasis on caring for the acutely and chronically ill adult and elderly patients in an outpatient medical setting. This clinical experience will enable the student to provide care as an entry level physician assistant upon graduation. Prerequisite: Successful completion of the didactic PHAS professional curriculum.

### PHAS 6442 Emergency Medicine

This core clinical rotation provides students with exposure to the principles and practice of emergency medicine. This supervised clinical practice experience enables students to assess patients seeking medical care (in the emergency department) across the life span with an emphasis on caring for the acutely ill patient. Students will gain exposure to the triage, evaluation, and management of patients in the emergent medical setting. Emphasis is on students assessing patient acuity, disease state, and appropriate management within the confines of the emergency medicine department. This clinical experience will enable the student to provide care as an entry level physician assistant upon graduation. Prerequisite: Successful completion of the didactic PHAS professional curriculum.

### PHAS 6443 Clinical Elective

This elective rotation provides students with opportunities to gain additional experience in one of the foundational core rotations or within a subspecialty/discipline of medicine. Students will be given the opportunity to understand and manage problems in the discipline chosen. This clinical experience will also enable the student to provide care as an entry level physician assistant upon graduation. Prerequisite: Successful completion of the didactic PHAS professional curriculum.

### PHAS 6444 Psychiatry Rotation

This core clinical rotation provides students with exposure to the principles and practice of psychiatry, behavioral, and mental health. This supervised clinical practice experience enables students to assess patients seeking medical care across the life span with an emphasis on caring for the child, adolescent, adult and elderly patient with a psychiatric illness, behavioral or mental health disorder. This clinical experience will also enable the student to provide care as an entry level physician assistant upon graduation. Prerequisite: Successful completion of the didactic PHAS professional curriculum.

### PHAS 7304 Capstone Research Experience

This course provides students the opportunity to conduct research. Students will search, interpret, and evaluate medical literature to develop a research project individualized to patient care. Instruction for this course will guide students to develop a research question, determine a research study design, and collect data. Students will utilize statistical methods to appraise the data obtained and determine the best application of their results for the improvement of patient care. Admission into the Physician Assistant Studies Program.

# PHAS 7404 Capstone Review

This seminar course is designed to assess the cumulative didactic and clinical knowledge base developed throughout the entire PHAS curriculum. Performance on standardized examinations is used in conjunction with both formative and summative benchmarks to analyze readiness for graduation and professional clinical practice. This course consists of two summative evaluations (written end-of-curriculum examination and a performance objective structured clinical examination) requirements for each student prior to graduation. The summative evaluation correlates with the didactic and clinical components of the program's curriculum and will measure each student's knowledge, interpersonal skills, patient care skills, and professionalism required to enter clinical practice. Admission into the Physician Assistant Studies Program.