# Monmouth University Physician Assistant Program Course Descriptions

# PHA-601 Human Anatomy

Anatomy is a central focus of basic science education. During this course the student is introduced to gross anatomy presented by the regional approach. The student becomes familiar with the back, chest, upper extremity, abdomen, pelvis, lower extremity, neck, head, the central nervous system, and internal viscera. Instruction is primarily in lecture and lab format. However, atlases, computer programs, and other visual aids are available. Student performance is evaluated in both written and practical examinations.

#### PHA-602 Human Physiology

This course will provide a basic understanding of human physiology while covering the processes of how the body functions. This lecture-based class will lead to an understanding of how the body responds to stimuli and how it maintains homeostasis while exposed to a varying environment.

#### PHA-603 Introduction to Patient Assessment

Students will be introduced to basic history taking and physical examination techniques, psychosocial development and behavior, and the effective relationship between the physician assistant, other health professionals, and the patient. Techniques of physical examination and use of examining equipment are introduced. Students are assigned to preceptors for the purpose of taking complete histories and performing complete physical examination on patients.

#### PHA-604 Behavioral Medicine

This course will provide an overview of psychiatric concepts and an introductory approach to the evaluation of patients with behavioral issues. It will include a discussion of various psychiatric syndromes, with review of causal factors and clinical presentation. This course will provide an overview of normal human behavior development over the life span. The impact that psychological problems have on the total health care of the patient will be emphasized.

#### PHA-605 Health Promotion

This course is designed to prepare students to provide health care and patient education using a patient-centered approach. Students will receive in-depth instruction in the principles of the patient-provider relationship, disease and the illness experience, health promotion and disease prevention. This course will include an overview of basic nutrition standards and guidelines, fundamentals of nutrition assessment, nutrition throughout the lifecycle.

## PHA-606 Physical Diagnosis

This course continues the focus of Introduction to Patient Assessment on developing physical examination skills and the process of clinical data collection. The course introduces the process of clinical reasoning and decision-making. Attention will be provided to the recognition and appropriate description of common abnormal physical findings. Emphasis will be placed on the analysis and interpretation of clinical data that occurs during the process of formulating a differential diagnosis.

#### PHA-607 Clinical and Diagnostic Procedures

Instruction in interpretation of and indications for clinical laboratory tests, electrocardiography, and diagnostic radiography. Identification and understanding of normal and abnormal results, and correlation with medical cases will be emphasized. The final exam emphasizes critical thinking with case based analysis. This course is divided into lecture and laboratory components. Portions of the course require on-line material review. The lecture sessions will include clinical laboratory sciences, electrocardiography, and radiology; appropriate use of diagnostic testing and an introductory understanding of diagnostic test result analysis. The laboratory component will demonstrate basic clinical CLIA-waived procedures and provide structured supervised practice in these procedural skills.

# PHA-608 Pharmacology for Physician Assistants

This course covers the most common classes of medications and their use in a variety of medical conditions. The primary focus of this course is the mechanism of actions of these drug classes and a description of different types of drug-receptor interactions. This basic pharmacology course allows the physician assistant student to better understand the clinical use of drugs covered in Clinical Therapeutics (PA 609).

## PHA-609 Clinical Therapeutics

This course is designed to demonstrate the practical application of pharmaceutical science as utilized for the formulation of drug therapy decisions. The co-requisite course is Pharmacology (PHA-608). These sessions will assist the physician assistant student to develop an understanding of common medication classes and their usage in primary care patient management. Furthermore, the course is structured to introduce the physician assistant student to the concept of preparing accurate and precise prescriptions. Management plans for initiating routine drug therapy are also highlighted in this course.

#### PHA-610 Pathophysiology

This course focuses on the fundamentals of the pathologic changes that occur in different organs of the body. Gross and microscopic specimens are used to provide a clear understanding of the disease processes that affect the human body. The course will be conducted as a lecture series that is supplemented by readings, lecture notes that will be emailed to you, and a review of pathologic slides and specimens when appropriate. The course will provide an understanding of the pathologic process that leads to clinical signs and symptoms of diseases.

#### PHA-611 Neuroscience

This course will cover the basic structure, organization, and function of the central nervous system (CNS). Lectures and laboratories focus on understanding localization of function within specific structures and pathways of the brain and spinal cord, and typical syndromes associated with vascular accidents, trauma or diseases of the various parts of the CNS.

Neuroscience is a foundational course addressing basic anatomy and physiology of the nervous system. Neuroscience incorporates the view that individuals actively use their bodies in typical and adaptive strategies to achieve mastery in life roles. Behaviors are learned and generated through normal functioning of the nervous system. With damage to the central nervous system, behavior—and therefore function—is altered. The central nervous system has the capacity to adapt or compensate behaviorally. This course prepares students in programs of occupational therapy, physical therapy and physician assistant with knowledge about normal function, the effects of damage, and neural plasticity in preparation for clinical intervention.

## PHA-612 Introduction to Physician Assistant Profession

This course is designed to introduce the student to the physician assistant profession and professional practice issues. Areas to be discussed include the history of the PA profession, significance of the PA-Physician team, professional organizations, professionalism, and professional development.

#### PHA-621 Topics in Medicine and Surgery

This course will instruct students in the various disease entities in preparation for clinical clerkships. Students will develop their knowledge base in the etiology, clinical presentation, differential diagnoses, and therapeutic approach to disease processes. This course is composed of a series of lectures provided by primary care practitioners and specialists. Topics covered include a full-range of adult and pediatric health problems. An introduction to the specialties of Obstetrics/Gynecology, Ophthalmology, and Surgery is included. Attention is focused on data collection, problem solving, clinical decision making, and the importance of incorporating patient education and preventive counseling in the clinical encounter. The schedule for this class is available on e-Campus and students must visit the site regularly to view the most current schedule.

# PHA-622 Clinical Management

Using literature searches, critical analysis, and newly acquired medical information students study various clinical patient scenarios and apply basic medical knowledge in an effort to evaluate and recommend appropriate treatment. Students will employ all the tools acquired in previous courses to analyze these scenarios to develop realistic diagnoses, problem lists, and plans incorporating the proper ancillary clinical and diagnostic methods appropriate for supporting the diagnosis. The student will also be required to recommend therapeutic measures as deemed necessary while becoming aware of the concept of drug formularies and treatment costs. This is the first student efforts to organize all of the knowledge gained to date and to exercise this knowledge in true patient management while beginning to understand the importance of high-value, cost-conscious patient care. This course is taken in conjunction with the Topics in Medicine and Surgery course.

#### PHA-625 Research Methods I

An exploration in the fundamental concepts of research in the health sciences. Problem finding, formulation of a research question, research methodology, design, and data collection and interpretation will be addressed. Ethical considerations in research will be discussed. Published research articles will be critically analyzed. At the conclusion of the course, the students will have developed the framework of an original study, which will be further developed in Biostatistics and Research Methods II.

#### PHA-626 Biostatistics for Physician Assistant Research

The goal of this course is to enhance each student's understanding and effective use of the techniques used to describe and analyze data in health sciences. The course is not intended to produce the sophistication in statistics, computer programming, or psychomotor application needed to develop and carry out major research projects. Rather, it is an introductory level course with the objective of developing students' competence in the application of the basic statistical techniques used to explore, describe, and analyze information for research or evaluation purposes.

#### PHA-632 Biomedical Ethics

The application of human and professional values, judgments, and choices to selective ethical dilemmas that arise in clinical practice. Traditional and contemporary approaches to resolving professional dilemmas will be discussed as well as ethics related to the delivery of health care.

#### PHA-633 Epidemiology for Physician Assistants

Provides a basic understanding of the epidemiologic method of identifying disease-causing agents. Emphasizes the generation of hypotheses based on descriptive epidemiologic data, the testing of hypotheses by analytical epidemiologic research, the determination of causality, and the value of epidemiologic research in developing disease prevention programs.

#### PHA-635 Research Methods II

Many of the tasks of this course are related to the completion of the research study which was begun in Research Methods 1. Much of the work of this single credit course is accomplished through small group activities outside of formal class sessions. Class sessions for the course are infrequent. These will be lecture – discussion sessions in which we will meet to discuss topics designed to facilitate the completion of the research study and to enhance knowledge of medical research in general. Reading assignments should be completed prior to these meetings so that class discussions can be meaningful. Lecture notes, assignments and announcements will be posted on the eCampus course site. Students should check eCampus regularly, once weekly at a minimum. Students are expected to participate in both class and web-based discussions.

#### PHA-636 Health Care Policy

The overall goal of this course is to provide the student with information regarding the various topics related to the U.S. health care delivery system. The student will also be made aware of the impact that health care policy and managed care has on the total health of a patient. The course is given during the final semester of the third professional year so the student can incorporate clinical skills with an analytical perspective on those issues that drive the current health care system. Classes will be conducted as a series of group discussions supported by the required textbook readings, eCampus posted articles, and small group led discussions on those articles with analysis focused on how each affects cost, quality and access to medical care. Attention will be given to the current events surrounding the issue of health care reform. Additionally, the course will be augmented by occasional guest lecturers.

# PHA-651 Clinical Clerkships I

Clinical Clerkship year 1 is the first in two years of clinical clerkships providing the physician assistant student with the real time patient/clinician exposures across required core and elective clinical experiences. In all experiences the student will be a member of either a health care delivery team and/or paired with a licensed practitioner in each medical discipline or service. Students are at all times held to the highest standards of professionalism and personal integrity. This syllabus is a supplement to the <a href="Student Clinical Handbook">Student Clinical Handbook</a> the contents of which govern all guidelines and policies related to clinical training in the Monmouth University Physician Assistant Program.

#### PHA-652 Clinical Clerkships II

Clinical Clerkship year 2 is the second clinical clerkship providing the physician assistant student with the real time patient/clinician exposures across required core and elective clinical experiences. In all experiences the student will be a member of either a health care delivery team and/or paired with a licensed practitioner in each medical discipline or service. Students are at all times held to the highest standards of professionalism and personal integrity. This syllabus is a supplement to the <a href="Student Clinical Handbook">Student Clinical Handbook</a> the contents of which govern all guidelines and policies related to clinical training in the Monmouth University Physician Assistant Program.

# PHA-653 Clinical Clerkships III

Clinical Clerkship year 3 is the third clinical clerkship providing the physician assistant student with the real time patient/clinician exposures across required core and elective clinical experiences. In all experiences the student will be a member of either a health care delivery team and/or paired with a licensed practitioner in each medical discipline or service. Students are at all times held to the highest standards of professionalism and personal integrity. This syllabus is a supplement to the <a href="Student Clinical Handbook">Student Clinical Handbook</a> the contents of which govern all guidelines and policies related to clinical training in the Monmouth University Physician Assistant Program.

## PHA-654 Clinical Clerkships IV

Clinical Clerkship year 3 is the fourth clinical clerkship providing the physician assistant student with the real time patient/clinician exposures across required core and elective clinical experiences. In all experiences the student will be a member of either a health care delivery team and/or paired with a licensed practitioner in each medical discipline or service. Students are at all times held to the highest standards of professionalism and personal integrity. This syllabus is a supplement to the <a href="Student Clinical Handbook">Student Clinical Handbook</a> the contents of which govern all guidelines and policies related to clinical training in the Monmouth University Physician Assistant Program.