



## Didactic Course descriptions

### Semester 1 - Spring (16 weeks)

#### **GSPA 735-01 Medical Anatomy and Lab (5 Credits)**

This course is a foundation course essential to clinical practice of medicine. It will provide a comprehensive survey of the gross anatomy of the human body, while incorporating clinical correlation and allow the students to apply knowledge learned. The survey of the body will include the back, upper and lower extremities, thorax, abdomen, pelvis and perineum and the head and neck. Various structures within these areas, including osteology, soft tissue, muscle, vessels and nerves, will demonstrate common pathologies encountered in medical practice.

#### **GSPA 733-01 Pathophysiology I (4 credits)**

This course is the first of two courses designed to provide a foundation in normal physiology while providing associated pathology. The purpose of this course is to enable first year PA students to understand mechanisms that allow the body to function at the cellular, tissue, organ system and whole-body levels, with an emphasis on organ system and whole-body levels, and how these mechanisms are affected in pathologic states.

#### **GSPA 752-01 Physical Examination and Documentation I (4 credits)**

Physical Examination and Documentation I is a four credit hour course designed to provide students with the skills and knowledge needed to elicit a comprehensive history and perform a complete physical examination. Discussions and demonstrations will introduce the appropriate use of diagnostic equipment, interviewing techniques, cultural awareness, patients' rights, and confidentiality. The student will be taught to recognize and differentiate normal from abnormal physical examination findings and to record and orally present their findings in an organized manner.

#### **GSPA 725-01 Physician Assistant Profession (2 credits)**

Physician Assistant Profession offers students the opportunity to understand their professional environment, community resources, legal parameters, and ethical situations they may face. The course also addresses interpersonal dynamics in working with physicians and other healthcare providers.

#### **GSPA 747-01 Applied Learning Experience I (2 credits)**

Applied Learning Experience I is the first in a series of four courses designed to develop student skills related to the integration of patient assessment and clinical medicine concepts from other courses in their curriculum. Student learners will review how to search, interpret, and evaluate the medical literature, then focus on a step-by-step approach to further develop and implement their group Capstone project. Student learners will gain an understanding of the principles of research via, patient-centered problem-based learning activities, critically appraising medical literature, and further developing their group capstone project.



### **GSPA 739-01 Medical Research and Information Literacy (2 credits)**

This course is designed to help develop critical thinking regarding interpretation of evidence-based practice and medical research literature and its application to patient care to promote evidence-based clinical practice research. Medical knowledge is far from static, and the best clinicians of the coming decades will be those who can most effectively filter and integrate the latest scientific evidence to provide customized, safe, patient-centered care in every clinical encounter. In this course, we will integrate concepts of epidemiology, research study design, and biostatistics and apply them to the interpretation of medical literature, with the ultimate goal of producing clinically relevant answers to patient care-related questions.

## **Semester 2 - Summer (10 weeks)**

### **GSPA 745-01 Pathophysiology II (4 credits)**

This course is the second of two courses designed to provide a foundation in normal physiology while providing associated pathology. The purpose of this course is to enable first year PA students to understand mechanisms that allow the body to function at the cellular, tissue, organ system and whole-body levels, with an emphasis on organ system and whole-body levels, and how these mechanisms are affected in pathologic states.

### **GSPA 720-01 Clinical Laboratory and Medical Imaging (3 credits)**

This course will provide the Physician Assistant student with an overview of commonly utilized laboratory tests, and the principles of radiological imaging. The student will learn the appropriate application of these laboratory tests in a clinical setting, and the interpretation of selected clinical laboratory data. The student will also learn the principles of conventional x-ray, computerized tomography, angiography, magnetic resonance imaging, sonography and fluoroscopy as they are applied to the common pathological processes.

### **GSPA 753-01 Physical Examination and Documentation II (4 credits)**

The second course in the series, Physical Examination and Documentation II is a four credit hour course designed to develop clinical decision-making while recognizing the medical needs and challenges within the healthcare system for specific patient population. We will utilize problem-focused case studies, simulations, small groups, and discussions to apply concepts learned in class. Focus will be on developing a differential diagnosis, collecting, and performing a problem focused history and physical exam and documentation in the medical record utilizing SOAP Notes and the electronic medical record. Emphasis is placed on effective communication skills, social, cultural and behavioral issues affecting health and disease and health literacy.



### **GSPA 724-01 Medical Ethics and Legal Medicine (2 credits)**

This course introduces PA students to the four areas of medical ethics and provide them with the opportunity to develop skills in identifying, analyzing, and resolving ethical issues in clinical medicine. PA students will participate in research related to medical ethics and learn to apply medical ethics in clinical, research and community environments.

## **Semester 3 - Fall (16 weeks)**

### **GSPA 734-01 Pharmacology I (3 credits)**

This course is designed to provide a solid foundation in pharmacokinetics, pharmacodynamics, and the physiology associated with drug mechanism of action and interaction. Specific drug classes will be discussed, with attention given to individual drugs, their uses, side effects, similarities, and differences. The relative cost, pharmacokinetics, pharmacodynamics for frequently prescribed agents for treatment of common diseases related to the following organ systems will also be discussed: Cardiovascular System, Gastrointestinal System/Nutrition, EENT, Infectious Diseases, the Dermatologic System, Hematologic System, and the Renal System.

### **GSPA 728-01 Adult Clinical Medicine I (4 credits)**

The main emphasis of all Clinical Medicine (CM) courses centers on the principles and provision of primary care medicine in all settings, especially rural and underserved areas. Adult Clinical Medicine I serve as the first course in the Clinical Medicine course series. Adult Clinical Medicine I utilizes an organ system approach to present disease processes in terms of epidemiology, etiology, clinical presentation, physical exam findings, diagnostic studies, differential diagnoses, treatment/ management, patient education and health maintenance. Topics include diseases and conditions pertinent to the Cardiovascular System, Gastrointestinal System/Nutrition, EENT, the Dermatologic System, Hematologic System, and the Renal System.

### **GSPA 714-01 Clinical Procedure Skills I (2 credits)**

Clinical Procedure Skills I introduces students to essential procedures and skills necessary for practice, such as venipuncture; obtaining blood cultures; arterial blood gases, IV insertion; Injections; Endotracheal intubation; Nasogastric tube placement; and urinary bladder catheterization, and more.

### **GSPA 754-01 Public Health (2 credits)**

The Public Health course is a 2-credit hour course designed to explore the concepts of public health as they relate to the role of the practicing physician assistant and will examine such concepts as disease prevention, surveillance, reporting and intervention, patient advocacy and maintenance of population health. At the conclusion of this course, the physician assistant student will have an appreciation for the public health system, the health care delivery system, and health policy.



**GSPA 755-01 Reproductive Health (3 credits)**

This course offers a systemic study of the epidemiology, presentation, differential diagnosis, and management of OB/GYN and urologic disease processes essential to primary care practice.

**GSPA 751-01 Introduction to Surgery (2 credits)**

The course is designed to provide the students with an introduction and an overview to the discipline of surgery. The management of acute surgical problems, critical illness, and elective surgical procedures will be discussed, as well as the pre- and post-operative care of the surgical patient. The course will also introduce knot tying, surgical asepsis, and surgical instrumentation

**GSPA 748-01 Applied Learning Experience II (2 credits)**

Applied Learning Experience II is the second in a series of four courses designed to develop student skills related to integration of patient assessment and clinical medicine concepts from other courses in their curriculum. Student learners will review how to search, interpret, and evaluate the medical literature, then focus on a step-by-step approach to the further develop and implement their group Capstone project. Student learners will gain an understanding of the principles of research via, patient-centered problem-based learning activities, critically appraising medical literature, and further developing their group capstone project.

**Semester 4 - Spring (16 weeks)**

**GSPA 744-01 Pharmacology II (3 credits)**

This course is designed to provide a solid foundation in pharmacokinetics, pharmacodynamics, and the physiology associated with drug mechanism of action and interaction. Specific drug classes will be discussed, with attention given to individual drugs, their uses, side effects, similarities, and differences. The relative cost, pharmacokinetics, pharmacodynamics for frequently prescribed agents for treatment of common diseases related to the following will be discussed: the Genitourinary and Reproductive System (Male and Female), Pain Management, Neoplasms, the Pulmonary System, the Neurologic System, the Psychiatry/Behavioral Science, and the Endocrine System. Musculoskeletal System, Pulmonary System, Neurologic System, Psychiatry/Behavioral Science, and the Endocrine System.



### **GSPA 729-01 Adult Clinical Medicine II (4 credits)**

The main emphasis of all Clinical Medicine (CM) courses centers on the principles and provision of primary care medicine in all settings, especially rural and underserved areas. Adult Clinical Medicine II serves as the second course in the Adult Clinical Medicine course series. Adult Clinical Medicine II utilizes an organ system approach to present disease processes in terms of epidemiology, etiology, clinical presentation, physical exam findings, diagnostic studies, differential diagnoses, treatment/ management, patient education and health maintenance. Topics include diseases and conditions pertinent to the Genitourinary System (Male and Female), Reproductive System (Male and Female), Musculoskeletal System, Pulmonary System, Neurologic System, Psychiatry/Behavioral Science, and the Endocrine System

### **GSPA 737-01 Pediatric Clinical Medicine (3 credits)**

This course provides an introduction to the fundamentals of pediatric medicine, covering the age span from neonate through adolescence. Topics covered include normal growth and development, preventive care and anticipatory guidance, common pediatric illnesses and disorders and their diagnosis and management. Less common, but important disorders that are peculiar to the pediatric population are also included.

### **GSPA 741-01 Clinical Procedure Skills II (2 credits)**

Clinical Procedure Skills II is the second in a series of two courses used to introduce students to essential procedures and skills necessary for practice, such as casting and splinting, local anesthesia, wound closure, wound closure and dressing techniques and more. The students will have the opportunity to complete ACLS and BLS training.

### **GSPA 732-01 Geriatrics (2 credits)**

This course is designed to provide students the principles of geriatric medicine to provide appropriate, evidence-based, compassionate care to older adult patients. The focus of the course will be on the clinical implications of changes associated with the expected physiologic aging process, as well as the common pathologies and treatment within this patient population.

### **GSPA 726-01 Behavioral Medicine (3 credits)**

The course will present an introduction to the neurobiological, psychobiological, emotional, social, and cultural influences on health and illness in the practice of primary care medicine. Personality, sexual, emotional, and behavioral development across the lifespan including end of life issues will be reviewed. Normative and maladaptive responses to developmental tasks and life stressors in relation to physical and emotional health will be emphasized. Principles of violence, identification and prevention will be examined. Instruction and practice in basic



counseling skills for patient health care management and implementation of healthier lifestyle practices will be an important focus throughout the course

### **GSPA 749-01 Applied Learning Experience III (1 credit)**

Applied Learning Experience III is the third in a series of four courses designed to develop student learner skills related to integration of patient assessment and clinical medicine concepts from other courses in the MMC PA Program curriculum. Student learners will review how to search, interpret, and evaluate the medical literature, then focus on a step-by-step approach to the further develop and implement their group Capstone project. Student learners will gain an understanding of the principles of research via patient-centered problem-based learning activities, critically appraising medical literature, and further developing their group Capstone project.

## **Supervised Clinical Practice Experience Course Descriptions**

### **Semester V- VII**

#### **GSPA 705-01: Surgery Structured Clinical Practice Experience (4 credits)**

This four-week Surgical SCPE provides the physician assistant students the opportunity to participate in the medical decision-making process while developing the appropriate knowledge, skills, and abilities to provide care in the surgical setting. The experiences in this SCPE will include pre-operative, intra-operative (assisting), and post-operative surgical care. The students will perform minimal surgical procedures and become educated in the management and overall care of the surgical patient.

#### **GSPA 706-01: Behavioral Medicine Structured Clinical Practice Experience (4 credits)**

This four-week behavioral Medicine clinical rotation is designed to provide the physician assistant student with the opportunity to participate in the medical decision-making process while developing the appropriate knowledge, skills, and abilities to provide care in the behavioral/mental health setting. The student will be exposed to common psychological and substance abuse conditions. Focus will be on recognizing and understanding the development and presentation of these behaviors and how to provide intervention and treatment.

#### **GSPA 707-01: Pediatrics Structured Clinical Practice Experience (4 credits)**

This four-week Pediatric clinical rotation is designed to provide the physician assistant student with the opportunity to participate in the medical decision-making process while developing the appropriate knowledge, skills, and abilities to provide care in the ambulatory outpatient pediatric medicine setting. In this rotation, the student will learn the aspects of caring for the pediatric patient from birth through adolescence. The focus will be on recognizing and



managing common childhood illnesses, assessment of growth and development, immunizations, nutrition, psycho-social issues and preventative health care.

**GSPA 708-01 Women's Health Structured Clinical Practice Experience (4 credits)**

This four-week Women's Health clinical rotation provides the physician assistant student with experience learning and practicing the principles of Women's Health (OB/GYN). The PA student will be provided opportunities to acquire and develop skills to evaluate and appropriately manage women's health patients.

**GSPA 709-01: Internal Medicine Structured Clinical Practice Experience (4 credits)**

This four-week Internal Medicine clinical rotation is designed to provide the physician assistant student with the opportunity to participate in the medical decision-making process while developing the appropriate knowledge, skills, and abilities to provide acute and chronic medical conditions encountered in the internal medicine setting. This SCPE will provide students with direct experience in the evaluation, treatment, and management of complex cases, which may occur in the inpatient or out-patient setting.

**GSPA 711-01: Family Medicine Structured Clinical Practice Experience (4 credits)**

This four-week Family Medicine clinical rotation is designed to provide the physician assistant student with the opportunity to participate in the medical decision-making process while developing the appropriate knowledge, skills, and abilities to provide care in the ambulatory outpatient family medicine setting. PA students will be responsible for patients of all ages, from initial visit, through possible hospitalization and follow-up. This SCPE will deliver education on providing comprehensive, evidence-based, gender/age specific individualized care, while addressing acute and chronic diseases, health promotion and disease prevention

**GSPA 713-01: Emergency Medicine Structured Clinical Practice Experience (4 credits)**

This four-week Emergency Medicine rotation is designed to provide the physician assistant student with the opportunity to participate in the medical decision-making process while developing the appropriate knowledge, skills, and abilities to provide care in the emergency medicine setting. The student will be able to develop skills in emergency treatment and actions to sustain life and manage a variety of acute, life threatening medical, surgical, and behavioral health clinical problems, specific to the emergency department

**GSPA 742-01: Clinical Elective I (4 credits)**

This four-week clinical experiences under the supervision of a physician and/or Physician Assistant designed to acquaint the student with those aspects of the practice of medicine unique to the specific discipline and give the student an opportunity to gain experience in a specific area of interest. Area of interest are chosen from a variety of family medicine, internal medicine specialties, medicine subspecialties or surgical subspecialties. The student will be able



to recognize conditions treatable by these specialties, so they can refer patients appropriately and/or work in a supportive role for such specialties.

#### **GSPA 750-01 Applied Learning Experience IV (1 credit)**

Applied Learning Experience IV, the final course of the ALE course series, is designed to develop student learner skills related to integrating patient assessment and clinical medicine concepts learned during the didactic and clinical phase of the program. During ALE IV, PA student learner groups will complete their Capstone Project, which includes conducting a literature review and writing a thesis paper under the guidance of a faculty research advisor. The specific skills developed through this process include:

- Critically evaluating relevant medical literature
- Comprehending the research process
- Enhancing the awareness of potential research questions related to clinical practice in underserved areas
- Utilize evidence from clinical and epidemiological research as a basis for clinical decision-making
- Write in a clear, concise, and logical manner

Student learners will meet regularly with their Capstone research advisor to discuss preliminary drafts of their scholarly work and associated assignments. Each research group is required to present their approved Capstone Research Project to a panel that includes at least one of the course directors and one clinical faculty member.