

**Thiel College**  
**Master of Science – Physician Assistant Studies**  
**Course Descriptions**

**PA 501 Medical Science I**      2 CH

This is the first of three courses designed to develop an understanding of homeostasis and the relationship of physiology, pathophysiology, and human genetic concepts of disease as they pertain to each organ system or area of medicine covered in PA 504 Principles of Medicine I. This course will incorporate anatomy within a clinical context with an emphasis on important anatomical structure and function relevant to the physical exam, diagnosis, and development of disease and in the anatomical relationships of structures to each other. Lectures, discussions, anatomy lab participation, case studies, and a multimedia approach will be used to present the material.

**PA 502 Medical Science II**      3 CH

This is the second of three courses designed to develop an understanding of homeostasis and the relationship of physiology, pathophysiology, and human genetic concepts of disease as they pertain to each organ system or area of medicine covered in PA 505 Principles of Medicine II. This course will incorporate anatomy within a clinical context with an emphasis on important anatomical structure and function relevant to the physical exam, diagnosis, and development of disease and in the anatomical relationships of structures to each other. Lectures, discussions, anatomy lab participation, case studies, and a multimedia approach will be used to present the material.

**PA 503 Medical Science III**      3 CH

This is the third of three courses designed to develop an understanding of homeostasis and the relationship of physiology, pathophysiology, and human genetic concepts of disease as they pertain to each organ system or area of medicine covered in PA 506 Principles of Medicine II. This course will incorporate anatomy within a clinical context with an emphasis on important anatomical structure and function relevant to the physical exam, diagnosis, and development of disease and in the anatomical relationships of structures to each other. Lectures, discussions, anatomy lab participation, case studies, and a multimedia approach will be used to present the material.

**PA 504 Principles of Medicine I**      3 CH

This is the first in a series of courses designed to provide the study of human diseases and disorders by organ system, using a lifespan approach from newborn to the elderly. Course includes epidemiology, etiology, history, clinical signs and symptoms, differential diagnosis, diagnosis, diagnostic studies, therapeutic management, prevention, and prognosis of disease in clinical medicine. Organ systems covered include dermatology, otolaryngology, ophthalmology, pulmonary, and hematology. Emphasis will be on disease processes common to primary care practices using lecture, case study, and a problem-based learning approach.

**PA 505 Principles of Medicine II**     5 CH

This is the second in a series of courses designed to provide the study of human diseases and disorders by organ system, using a lifespan approach from newborn to the elderly. Course includes epidemiology, etiology, history, clinical signs and symptoms, differential diagnosis, diagnosis, diagnostic studies, therapeutic management, prevention, and prognosis of disease in clinical medicine. Organ systems covered include cardiovascular, neurology, endocrinology, gastroenterology/nutrition, nephrology and genitourinary, orthopedics, and obstetrics and gynecology. Emphasis will be on disease processes common to primary care practices using lecture, case study, and a problem-based learning approach.

**PA 506 Principles of Medicine III**     5 CH

This is the third in a series of courses designed to provide the study of human diseases and disorders by organ system, using a lifespan approach from newborn to the elderly. Course includes epidemiology, etiology, history, clinical signs and symptoms, differential diagnosis, diagnosis, diagnostic studies, therapeutic management, prevention, and prognosis of disease in clinical medicine. Modules covered include rheumatology, HIV medicine, geriatrics, pediatrics, oncology, surgery, and emergency medicine. Emphasis will be on disease processes common to primary care practices using lecture, case study, and a problem-based learning approach.

**PA 507 Pharmacology I**     1 CH

This is the first in a series of three courses designed to provide the student with an understanding of the mechanisms by which drugs alter the function of living cells to relieve symptoms and physiologic manifestations of disease. This course will begin with an introduction to general principles of pharmacology, pharmacokinetics, and pharmacodynamics, and then concentrate expressly on the pharmacotherapeutics germane to the organ system modules covered in this trimester. At the end of the course, students will understand the general properties of drug categories and prototypical drugs used to treat diseases of these body systems and apply these pharmacologic concepts to clinical situations. Through lecture and case study, special emphasis will be placed on the development of problem-solving and medical decision-making skills as they relate to the clinical use of pharmacotherapeutics. This course will be a hybrid course of digital and on-campus learning.

**PA 508 Pharmacology II**     2 CH

This is the second in a series of three courses designed to provide the student with an understanding of the mechanisms by which drugs alter the function of living cells to relieve symptoms and physiologic manifestations of disease. This course will begin with an introduction to general principles of pharmacology, pharmacokinetics, and pharmacodynamics, and then concentrate expressly on the pharmacotherapeutics germane to the organ system modules covered in this trimester. At the end of the course, students will understand the general properties of drug categories and prototypical drugs used to treat diseases of these body systems and apply these pharmacologic concepts to clinical situations. Using lecture and case study, special emphasis will be placed on the development of problem-solving and medical decision-making skills as they relate to the clinical use of pharmacotherapeutics. This course will be a hybrid course of digital and on-campus learning.

**PA 509 Pharmacology III**      2 CH

This is the third in a series of three courses designed to provide the student with an understanding of the mechanisms by which drugs alter the function of living cells to relieve symptoms and physiologic manifestations of disease. This course will begin with an introduction to general principles of pharmacology, pharmacokinetics, and pharmacodynamics, and then concentrate expressly on the pharmacotherapeutics germane to the organ system modules covered in this trimester. At the end of the course, students will understand the general properties of drug categories and prototypical drugs used to treat diseases of these body systems and apply these pharmacologic concepts to clinical situations. Using lecture and case study, special emphasis will be placed on the development of problem-solving and medical decision-making skills as they relate to the clinical use of pharmacotherapeutics. This course will be a hybrid course of digital and on-campus learning.

**PA 510 Patient Assessment & Clinical Reasoning I**      2 CH

This is the first of two courses designed to develop the knowledge and skills required to elicit, perform, and document the complete medical history and physical exam with use of appropriate equipment, proper exam techniques, and accurate medical terminology. Students will learn the skills needed to recognize normal anatomy, normal anatomical variation, and disease states. The course will provide an overview of the medical record as well as development of writing and oral presentation skills. History-taking, physical examination, clinical reasoning skills, and documentation skills will be developed through lecture and structured small group workshop exercises.

**PA 511 Patient Assessment & Clinical Reasoning II**      3 CH

This is the second of two courses designed to develop the knowledge and skills required to elicit, perform, and document the complete medical history and physical exam with use of appropriate equipment, proper exam techniques, and accurate medical terminology. Students will learn the skills needed to recognize normal anatomy, normal anatomical variation, and disease states. The course will provide an overview of the medical record as well as development of writing and oral presentation skills. History-taking, physical examination, clinical reasoning skill, and documentation skills will be developed through lecture and structured small group workshop exercises.

**PA 512 Diagnostic Medicine I**      3 CH

This is the first of two courses designed to develop a functional understanding of the appropriate uses and interpretations of clinical diagnostic testing, to include serologic, microscopic studies and radiographic interpretation. Students will learn to select, interpret, and apply appropriate laboratory, imaging, and other diagnostic tests and determine clinical significance. Skills will be developed through lecture and structured small-group workshops.

**PA 513 Diagnostic Medicine II**      2 CH

This is the second of two courses designed to develop a functional understanding of the appropriate uses and interpretations of clinical diagnostic testing, to include serologic, microscopic studies, radiographic and EKG interpretation. Students will learn to select, interpret, and apply appropriate laboratory, imaging, and other diagnostic tests and determine clinical significance. EKG interpretation is taught in this course. Skills will be developed through lecture and structured small group workshops. This course will be a hybrid course of digital and on-campus learning.

**PA 514 Professional Practice**      1 CH

This course is designed to discuss the role of the Physician Assistant in the context of the healthcare system, as well as issues pertaining to the Physician Assistant's practice of medicine within an interprofessional team. This course will include interpersonal skills and communication, history of the Physician Assistant profession, introduction to PA professional organizations, patient safety, and medical and professional ethics. Instruction for this course will consist of lectures, case studies, and small-group discussions. This course will be a hybrid course of digital and on-campus learning.

**PA 515 Infectious Disease/Clinical Microbiology**      2 CH

This course is designed to introduce students to the concepts of medical microbiology and the principles of infectious disease. The focus will be on epidemiology, virulence, and pathogenicity of selected organisms, pathophysiology, clinical presentation, and general management of infectious disease states. These topics will be explored through lecture, discussion, and case studies.

**PA 516 Evidence-Based Medicine and Public Health**      3 CH

This course will serve as an introduction to the theory and practice of evidence-based medicine, as well as the complementary field of public health. Students will learn to search, interpret, and evaluate medical literature critically, developing the knowledge and skills necessary to integrate evidence-based answers into clinical practice. Students will also demonstrate the ability to effectively communicate these evidence-based concepts to peers and patients. This course will allow students to gain an appreciation of the public health system through an understanding of selected public health topics. Students will examine their role, as future health care providers, in the prevention of disease and maintenance of population health.

**PA 517 Behavioral/Mental Health Medicine**      2 CH

This course is designed to provide the study of human disease and disorders associated with mental and behavioral diseases, and introduces the special needs and care of the mental health patient with an emphasis on disease management with the ultimate goal of improving the functional status of individuals with mental health diseases. The student will also consider social, personal, and cultural attitudes toward mental illness. Course will be taught using lecture, case study, interviewing, and problem-based approach.

**PA 521 Clinical Skills & Procedures I**      2 CH

This course will prepare the student for the upcoming clinical year. The focus will be on procedures including sterile technique, venipuncture, IV placement, injections, airway management and endotracheal intubation, nasogastric tube placement, lumbar puncture, urinary bladder catheter insertion, bandaging, casting and splinting, local anesthesia, and wound management and closure. Instruction for this course will consist of lectures and structured small group clinical skills exercises.

**PA 522 Clinical Skills & Procedures II**      2 CH

This course will prepare the student for the upcoming clinical year. The focus will be on procedures including sterile technique, venipuncture, IV placement, injections, airway management and endotracheal intubation, nasogastric tube placement, lumbar puncture, urinary bladder catheter insertion, bandaging, casting and splinting, local anesthesia, and wound management and closure. Instruction for this course will consist of lectures and structured small group clinical skills exercises.

**SPAN 523 Medical Spanish**      2 CH

This course is designed to improve students' communication in clinical situations with patients whose native language is Spanish. The focus of the instruction will be on learning basic conversational skills in order to elicit clinical histories, conduct physical examinations, and give instructions to Spanish-speaking patients. Instruction for this course will consist of lectures and class discussion

**PA 524 Healthcare Delivery**      2 CH

This course is designed to expose the student to current trends in the U.S. healthcare system. The focus of instruction will be given to healthcare delivery systems and policy, healthcare information systems, interprofessional healthcare teams, and healthcare outcomes. As the student transitions from the didactic to the clinical year, topics on patient safety, prevention of medical errors, ethical dilemmas, risk management and quality improvement germane to clinical practice will be discussed. Instruction regarding the financing healthcare, electronic medical records, reimbursement, coding and billing will also be taught in this course. The format for this course will consist of lectures, case studies, and online discussions. This course will be a hybrid course (digital learning and on-campus course).

**PA 525 Clinical Medicine Across the Lifespan**      4CH

This course is designed to provide the study of primary care, which is defined as the comprehensive first contact and continuing, coordinated care for persons with any undiagnosed sign, symptom, or health concern, not limited by problem origin (biological, behavioral, or social), organ system, or diagnosis. The focus will be on patient-centered, interprofessional, and cost-effective care, with an emphasis on the approach to, unique needs of and management issues for specific patient populations, including Pediatrics, Adolescents, Adult Medicine, Women's Health and Geriatrics. Course will be taught using lecture and case studies. The goal of this course is to assimilate the information learned in didactic courses to prepare the students for their transition to clinical practice

**PA 526 Surgery/Emergency Medicine**      2 CH

This course will explore the injuries, diseases, and other conditions relating to the various medical disciplines (i.e., cardiology, gastroenterology, pulmonology) as they present and are managed in an emergency department setting. The course will also introduce surgical concepts, including inpatient and outpatient management of the surgical patient, types of surgical procedures, and conditions treated by the general surgery and surgical subspecialties. Course information will be presented via lectures, group discussions, presentations. ACLS certification will also be included in this course.

**PA 527 Clinical Practicum**          2 CH

This course incorporates experiential learning to prepare the student for clerkships and eventually clinical practice. It also continues to facilitate the transition of knowledge and skills from the academic phase to the clinical phase, giving students the opportunity to hone teamwork and patient care skills. Students will be placed in clinic and hospital settings for half day (3 hour) sessions multiple times throughout the semester. An optional interprofessional patient care activity with other graduate health care professions graduate students will also be offered. At the conclusion of the semester, students will meet in the classroom to discuss their experiences.

**PA 528 Professional Development I**          1 CH

This course is the first in a series of three designed to assist students in applying the knowledge learned in their didactic courses to their clinical experiences, as well as to provide ongoing preparation for the PANCE. Other topics to be covered will include professionalism, effective communication, patient safety, ethics, adherence to regulations, and teamwork. The course will also help prepare the students for the transition from student to health care professional, including licensing, job search, interviewing skills, professional etiquette, contracts, self-care strategies, work-life balance. The course will be a blend of online assignments and discussions while on Clerkships, along with lectures and group activities on call back days.

**PA 529 Professional Development II**          1 CH

This course is the second in a series of three designed to assist students in applying the knowledge learned in their didactic courses to their clinical experiences, as well as to provide ongoing preparation for the PANCE. Other topics to be covered will include professionalism, effective communication, patient safety, ethics, adherence to regulations, and teamwork. The course will also help prepare the students for the transition from student to health care professional, including licensing, job search, interviewing skills, professional etiquette, contracts, self-care strategies, work-life balance. The course will be a blend of online assignments and discussions while on Clerkships, along with lectures and group activities on call back days.

**PA 530 Professional Development III**          1 CH

This course is the third in a series of three designed to assist students in applying the knowledge learned in their didactic courses to their clinical experiences, as well as to provide ongoing preparation for the PANCE. Other topics to be covered will include professionalism, effective communication, patient safety, ethics, adherence to regulations, and teamwork. The course will also help prepare the students for the transition from student to health care professional, including licensing, job search, interviewing skills, professional etiquette, contracts, self-care strategies, work-life balance. The course will be a blend of online assignments and discussions while on Clerkships, along with lectures and group activities on call back days.

**PA 531 Clinical Clerkships I (Rotations 1,2,3)**          15 CH

The first in a series of three clinical clerkship experiences, starting in the fall semester for 15-weeks in duration. This course is designed to allow students to develop the knowledge, skills, abilities and attitudes

required to care for patients of all age groups. Students will be assigned to three different clinical rotations, with a mandatory two-day call back session in the final week of each rotation. The rotations can occur in any of the following disciplines: Family Medicine, Surgery, Internal Medicine, Pediatrics, Women's Health, Emergency Medicine, Behavioral Health or an elective discipline.

**PA 532 Clinical Clerkships II (Rotations, 4,5,6)** 15 CH

The second in a series of three clinical clerkship experiences, starting in the spring semester for 15-weeks in duration. This course is designed to allow students to develop the knowledge, skills, abilities and attitudes required to care for patients of all age groups. Students will be assigned to three different clinical rotations, with a mandatory two-day call back session in the final week of each rotation. The rotations can occur in any of the following disciplines: Family Medicine, Surgery, Internal Medicine, Pediatrics, Women's Health, Emergency Medicine, Behavioral Health or an elective discipline.

**PA 533 Clinical Clerkships III (Rotation 7,8,9)** 15 CH

The third in a series of three clinical clerkship experiences, starting in the summer semester for 15-weeks in duration. This course is designed to allow students to develop the knowledge, skills, abilities and attitudes required to care for patients of all age groups. Students will be assigned to three different clinical rotations, with a mandatory two-day call back session in the final week of each rotation. The rotations can occur in any of the following disciplines: Family Medicine, Surgery, Internal Medicine, Pediatrics, Women's Health, Emergency Medicine, Behavioral Health or an elective discipline.