

## LMU-KNOXVILLE PA PROGRAM COURSE DESCRIPTIONS

### **PAS 506: Foundations of Clinical Medicine (7.0 credit hours)**

This course focuses on the basic sciences that serve as the foundation for the practice of clinical medicine. Students will undertake an advanced study of human physiology, genetic and molecular mechanisms of health and disease, and microbiology. Students will also learn basic principles of pharmacology such as pharmacokinetics, pharmacodynamics, drug absorption, metabolism, and excretion. This course will highlight anatomical, physiological, and pharmacologic principles related to human organs, systems, and cellular function that can then be applied to clinical medicine, disease processes, and pharmacotherapeutics. Instruction is primarily in lecture and small group discussion. Student learning is assessed primarily with multiple-choice and short answer question examinations.

Pre-requisite(s): Matriculation into the LMU-Knoxville PA Program

### **PAS 507: Introduction to Patient Evaluation and Clinical Skills (5.0 credit hours)**

This course provides students with an introduction to the clinical psychomotor skills necessary for evaluating patients and performing common clinical procedures. Students learn how to conduct and document a complete medical history and physical examination. Students are also introduced to the interpersonal and communication skills necessary for the effective exchange of information and collaboration with patients, families, and other health care professionals. Students also complete American Heart Association (AHA) or similar related courses. Instruction is primarily in lecture, laboratory sessions, and small group activities. Student learning is assessed primarily with multiple-choice question examinations, short answer questions, simulated patient encounters, and writing assignments.

Pre-requisite(s): Matriculation into the LMU-Knoxville PA Program

### **PAS 501: Clinically Oriented Anatomy and Dissection I (3.0 credit hours)**

This is the first of three courses focused on gross human anatomy presented in a regional approach. Students learn anatomical terminology and correlate structure with function. Learning objectives in the course align with many of the learning objectives in PAS 531 and 511. Instruction is primarily in lecture and laboratory format with identification of structures on prosected cadavers. Student learning is assessed primarily with multiple-choice question and laboratory practical examinations.

Pre-requisite(s): PAS 506 and PAS 507

### **PAS 502: Clinically Oriented Anatomy and Dissection II (4.0 credit hours)**

This is the second of three courses focused on gross human anatomy presented in a regional approach. Students learn anatomical terminology and correlate structure with function. Learning objectives in the course align with many of the learning objectives in PAS 532 and 512. Instruction is primarily in lecture and laboratory format with dissection and identification of structures on cadavers. Student learning is assessed primarily with multiple-choice question and laboratory practical examinations.

Pre-requisite(s): PAS 506, PAS 507, PAS 501, PAS 511, PAS 531, and PAS 541

### **PAS 503: Clinically Oriented Anatomy and Dissection III (2.0 credit hours)**

This is the third of three courses focused on gross human anatomy presented in a regional approach. Students learn anatomical terminology and correlate structure with function. Learning objectives in the course align with many of the learning objectives in PAS 532 and 513. Instruction is primarily in lecture and laboratory format with identification of structures on prosected cadavers. Student learning is assessed primarily with multiple-choice question and laboratory practical examinations.

Pre-requisite(s): PAS 506, PAS 507, PAS 501, PAS 502, PAS 511, PAS 512, PAS 531, PAS 532, PAS 541, and PAS 542

### **PAS 511: Patient Assessment and Clinical Skills I (4.0 credit hours)**

This is the first of three courses focused on patient assessment and clinical skills. Students develop interpersonal communication and clinical decision making skills as they learn how to elicit focused patient histories, perform focused physical examinations, interpret clinical findings, order and interpret diagnostic studies, generate differential diagnosis lists, determine the most likely diagnosis, explain clinical findings and assessments to patients and their families, determine appropriate management options, engage patients and their families to formulate patient-centered management plans, and present and document patient encounters. Students learn the indications, contraindications, and potential complications of common clinical procedures. Students also develop correct technique for and proper documentation of common clinical procedures. Students also complete American Heart Association (AHA) or similar related courses. Learning objectives in this course align with many of the learning objectives in PAS 501 and PAS 531. Instruction is primarily in small group discussion, simulated patient encounters, and laboratory format. Procedures are performed on simulated task trainers, human cadavers, and classmates as appropriate. Student learning is assessed by participation in course activities, written examinations, oral presentations, performance throughout simulated patient encounters, and practical examinations of procedural skills.

Pre-requisite(s): PAS 506 and PAS 507

**PAS 512: Patient Assessment and Clinical Skills II (4.0 credit hours)**

This is the second of three courses focused on patient assessment and clinical skills. Students develop interpersonal communication and clinical decision making skills as they learn how to elicit focused patient histories, perform focused physical examinations, interpret clinical findings, order and interpret diagnostic studies, generate differential diagnosis lists, determine the most likely diagnosis, explain clinical findings and assessments to patients and their families, determine appropriate management options, engage patients and their families to formulate patient-centered management plans, and present and document patient encounters. Students learn the indications, contraindications, and potential complications of common clinical procedures. Students also develop correct technique for and proper documentation of common clinical procedures. Students also complete American Heart Association (AHA) or similar related courses. Learning objectives in this course align with many of the learning objectives in PAS 502 and PAS 532. Instruction is primarily in small group discussion, simulated patient encounters, and laboratory format. Procedures are performed on simulated task trainers, human cadavers, and classmates as appropriate. Student learning is assessed by participation in course activities, written examinations, oral presentations, performance throughout simulated patient encounters, and practical examinations of procedural skills.

Pre-requisite(s): PAS 506, PAS 507, PAS 501, PAS 511, PAS 531, and PAS 542

**PAS 513: Patient Assessment and Clinical Skills III (3.0 credit hours)**

This is the third of three courses focused on patient assessment and clinical skills. Students develop interpersonal communication and clinical decision making skills as they learn how to elicit focused patient histories, perform focused physical examinations, interpret clinical findings, order and interpret diagnostic studies, generate differential diagnosis lists, determine the most likely diagnosis, explain clinical findings and assessments to patients and their families, determine appropriate management options, engage patients and their families to formulate patient-centered management plans, and present and document patient encounters. Students learn the indications, contraindications, and potential complications of common clinical procedures. Students also develop correct technique for and proper documentation of common clinical procedures. Students also complete American Heart Association (AHA) or similar related courses. Learning objectives in this course align with many of the learning objectives in PAS 503 and PAS 533. Instruction is primarily in small group discussion, simulated patient encounters, and laboratory format. Procedures are performed on simulated task trainers, human cadavers, and classmates as appropriate. Student learning is assessed by participation in course activities, written examinations, oral presentations, performance throughout simulated patient encounters, and practical examinations of procedural skills.

Pre-requisite(s): PAS 506, PAS 507, PAS 501, PAS 502, PAS 511, PAS 512, PAS 531, PAS 532, PAS 541, and PAS 542

**PAS 531: Principles of Clinical Medicine I (10.0 credit hours)**

This is the first of three courses focused on the evaluation and management of acute, emergent, and chronic presentations of medical and surgical conditions found in pediatric, adult, and geriatric patient populations. Students learn the epidemiology, etiology, physiology, pathophysiology, clinical presentation, diagnostic evaluation, prevention, and management (acute, longitudinal, pre-/intra-/post-operative, pharmacologic, non-pharmacologic, referral, rehabilitative, palliative/end-of-life) of these conditions. Students also learn how to generate differential diagnoses and make clinical decisions by linking relevant anatomic, physiologic, and pathophysiologic concepts with clinical presentations and diagnostic study results. Learning objectives in this course align with many of the learning objectives in PAS 501 and PAS 511. Instruction is primarily in lecture, small group discussion, and case study format. Student learning is assessed primarily with multiple-choice question examinations.

Pre-requisite(s): PAS 506 and PAS 507

**PAS 532: Principles of Clinical Medicine II (10.0 credit hours)**

This is the second of three courses focused on the evaluation and management of acute, emergent, and chronic presentations of medical and surgical conditions found in pediatric, adult, and geriatric patient populations. Students learn the epidemiology, etiology, physiology, pathophysiology, clinical presentation, diagnostic evaluation, prevention, and management (acute, longitudinal, pre-/intra-/post-operative, pharmacologic, non-pharmacologic, referral, rehabilitative, palliative/end-of-life) of these conditions. Students also learn how to generate differential diagnoses and make clinical decisions by linking relevant anatomic, physiologic, and pathophysiologic concepts with clinical presentations and diagnostic study results. Learning objectives in this course align with many of the learning objectives in PAS 502 and PAS 512. Instruction is primarily in lecture, small group discussion, and case study format. Student learning is assessed primarily with multiple-choice question examinations.

Pre-requisite(s): PAS 506, PAS 507, PAS 501, PAS 511, PAS 531, and PAS 541

**PAS 533: Principles of Clinical Medicine III (8.0 credit hours)**

This is the third of three courses focused on the evaluation and management of acute, emergent, and chronic presentations of medical and surgical conditions found in pediatric, adult, and geriatric patient populations. Students learn the epidemiology, etiology, physiology, pathophysiology, clinical presentation, diagnostic evaluation, prevention, and management (acute, longitudinal, pre-/intra-/post-operative, pharmacologic, non-pharmacologic, referral, rehabilitative, palliative/end-of-life) of these conditions. Students also learn how to generate differential diagnoses and make clinical decisions by linking relevant

anatomic, physiologic, and pathophysiologic concepts with clinical presentations and diagnostic study results. Learning objectives in this course align with many of the learning objectives in PAS 503 and PAS 513. Instruction is primarily in lecture, small group discussion, and case study format. Student learning is assessed primarily with multiple-choice question examinations. Pre-requisite(s): PAS 506, PAS 507, PAS 501, PAS 502, PAS 511, PAS 512, PAS 531, PAS 532, PAS 541, and PAS 542

**PAS 541: Physician Assistant Practice I (2.0 credit hours)**

The first of three courses focused on topics relevant to Physician Assistant practice. Instruction covers the historical development of the profession, professional organizations, the PA relationship with the physician and other health care providers, the roles and responsibilities of various health care professionals, the team approach to patient centered care, medical ethics, intellectual honesty, academic integrity, professional conduct, the provision of care to diverse populations, death, dying, and loss, patient response to illness, injury, and stress, and provider wellness. Student learning is assessed primarily with written assignments and/or small group activities.

Pre-requisite(s): PAS 506 and PAS 507

**PAS 542: Physician Assistant Practice II (2.0 credit hours)**

This is the second of three courses focused on topics relevant to Physician Assistant practice. Instruction covers methods to search, interpret, and evaluate medical literature, concepts of public health, patient safety, prevention of medical errors, quality improvement, and risk management. Student learning is assessed primarily with written assignments and/or small group activities.

Pre-requisite(s): PAS 506, PAS 507, PAS 501, PAS 511, PAS 531, and PAS 541

**PAS 543: Physician Assistant Practice III (1.0 credit hour)**

This is the third of three courses focused on topics relevant to Physician Assistant practice. Instruction covers coding and billing, documentation of care, health care delivery systems, health policy, credentialing, laws and regulations regarding professional practice and conduct, licensure, and certification, and policies that affect PA practice. Student learning is assessed primarily with written assignments and/or small group activities.

Pre-requisite(s): PAS 506, PAS 507, PAS 501, PAS 502, PAS 511, PAS 512, PAS 531, PAS 532, PAS 541, and PAS 542

**PAS 602: Clinical Conference / Clinical Phase Cumulative Assessment (2.0 credit hours)**

This course is focused on the medical knowledge and professional skills necessary for clinical practice as outlined in the Program's Clinical Phase Learning Outcomes (CPLO). Instruction includes professional practice seminars to help students apply concepts learned in PAS 541, 542, and 543 to the clinical setting. Student learning related to professional practice issues is assessed primarily with scholarly papers. Student achievement of CPLOs related to the provision of patient care is confirmed by clinical preceptors (CPLO Passport). Student development of CPLOs related to medical knowledge is assessed with a written examination following completion of all Supervised Clinical Practice Experiences (SCPEs).

Pre-requisite(s): PAS 506, PAS 507, PAS 501, PAS 502, PAS 503, PAS 511, PAS 512, PAS 513, PAS 531, PAS 532, PAS 533, PAS 541, PAS 542, and PAS 543

**PAS 611: Family Medicine – Outpatient (4.0 credit hours)**

This required 4-week supervised clinical practice experience under the supervision of the clinical site preceptor is designed to provide students with exposure to pediatric, adult, and geriatric patients seeking care for acute and chronic conditions and for health promotion and disease prevention in the outpatient setting. Students will also evaluate and assist in the longitudinal management of patients with multiple chronic conditions. Students will have the opportunity to apply knowledge and skills learned during the Didactic phase of the Program to novel patient encounters and develop Graduate Competencies.

Pre-requisite(s): PAS 506, PAS 507, PAS 501, PAS 502, PAS 503, PAS 511, PAS 512, PAS 513, PAS 531, PAS 532, PAS 533, PAS 541, PAS 542, and PAS 543

**PAS 621: Hospital Medicine (4.0 credit hours)**

This required 4-week supervised clinical practice experience under the supervision of the clinical site preceptor is designed to provide students with exposure to adult and geriatric patients admitted to the hospital for acute conditions and exacerbations of chronic conditions in the inpatient setting. Students will also evaluate and assist in the longitudinal management of patients with multiple chronic conditions. Students will have the opportunity to apply knowledge and skills learned during the Didactic phase of the Program to novel patient encounters and develop Graduate Competencies.

Pre-requisite(s): PAS 506, PAS 507, PAS 501, PAS 502, PAS 503, PAS 511, PAS 512, PAS 513, PAS 531, PAS 532, PAS 533, PAS 541, PAS 542, and PAS 543

**PAS 622: Primary Care (4.0 credit hours)**

This required 4-week supervised clinical practice experience under the supervision of the clinical site preceptor is designed to provide students with exposure to pediatric, adult, and/or geriatric patients seeking care for acute and chronic conditions and for health promotion and disease prevention in the outpatient and/or inpatient setting. Students will also evaluate and assist in the longitudinal management of patients with multiple chronic conditions. Students will have the opportunity to apply knowledge and skills learned during the Didactic phase of the Program to novel patient encounters and develop Graduate Competencies.

**Pre-requisite(s):** PAS 506, PAS 507, PAS 501, PAS 502, PAS 503, PAS 511, PAS 512, PAS 513, PAS 531, PAS 532, PAS 533, PAS 541, PAS 542, and PAS 543

**PAS 631: Behavioral Medicine (4.0 credit hours)**

This required 4-week supervised clinical practice experience under the supervision of the clinical site preceptor is designed to provide students with exposure to adult and elderly patients seeking care for behavioral and mental health conditions. Students will have the opportunity to apply knowledge and skills learned during the Didactic phase of the Program to novel patient encounters and develop Graduate Competencies.

**Pre-requisite(s):** PAS 506, PAS 507, PAS 501, PAS 502, PAS 503, PAS 511, PAS 512, PAS 513, PAS 531, PAS 532, PAS 533, PAS 541, PAS 542, and PAS 543

**PAS 641: Pediatric Medicine (4.0 credit hours)**

This required 4-week supervised clinical practice experience under the supervision of the clinical site preceptor is designed to provide students with exposure to infants, children, and adolescents brought for the care of acute and chronic conditions and health promotion and disease prevention in the outpatient setting. Students will also evaluate and assist in the longitudinal management of patients with multiple chronic conditions. Students will have the opportunity to apply knowledge and skills learned during the Didactic phase of the Program to novel patient encounters and develop Graduate Competencies.

**Pre-requisite(s):** PAS 506, PAS 507, PAS 501, PAS 502, PAS 503, PAS 511, PAS 512, PAS 513, PAS 531, PAS 532, PAS 533, PAS 541, PAS 542, and PAS 543

**PAS 651: Women's Health (4.0 credit hours)**

This required 4-week supervised clinical practice experience under the supervision of the clinical site preceptor is designed to provide students with exposure to adult and geriatric patients seeking care for acute and chronic gynecologic conditions, prenatal and obstetrical care, and for health promotion and disease prevention in the outpatient setting. Students will also evaluate and assist in the longitudinal management of patients with multiple chronic conditions. Students will have the opportunity to apply knowledge and skills learned during the Didactic phase of the Program to novel patient encounters and develop Graduate Competencies.

**Pre-requisite(s):** PAS 506, PAS 507, PAS 501, PAS 502, PAS 503, PAS 511, PAS 512, PAS 513, PAS 531, PAS 532, PAS 533, PAS 541, PAS 542, and PAS 543

**PAS 661: Emergency Medicine (4.0 credit hours)**

This required 4-week supervised clinical practice experience under the supervision of the clinical site preceptor is designed to provide students with exposure to pediatric, adult, and geriatric patients seeking care for acute and emergent conditions in the outpatient setting. Students will have the opportunity to apply knowledge and skills learned during the Didactic phase of the Program to novel patient encounters and develop Graduate Competencies.

**Pre-requisite(s):** PAS 506, PAS 507, PAS 501, PAS 502, PAS 503, PAS 511, PAS 512, PAS 513, PAS 531, PAS 532, PAS 533, PAS 541, PAS 542, and PAS 543

**PAS 671: Orthopedics (4.0 credit hours)**

This required 4-week supervised clinical practice experience under the supervision of the clinical site preceptor is designed to provide students with exposure to pediatric, adult, and geriatric patients seeking care for acute, chronic, and emergent medical and surgical orthopedic conditions in the outpatient and inpatient settings. Students will participate in pre-operative, intra-operative, and post-operative patient care. Students will have the opportunity to apply knowledge and skills learned during the Didactic phase of the Program to novel patient encounters and develop Graduate Competencies.

**Pre-requisite(s):** PAS 506, PAS 507, PAS 501, PAS 502, PAS 503, PAS 511, PAS 512, PAS 513, PAS 531, PAS 532, PAS 533, PAS 541, PAS 542, and PAS 543

**PAS 681: Surgery (4.0 credit hours)**

This required 4-week supervised clinical practice experience under the supervision of the clinical site preceptor is designed to provide students with exposure to pediatric, adult, and geriatric patients seeking care for acute, chronic, and emergent surgical conditions in the outpatient and inpatient settings. Students will participate in preoperative, intra-operative, and post-operative

patient care. Students will have the opportunity to apply knowledge and skills learned during the Didactic phase of the Program to novel patient encounters and develop Graduate Competencies.

**Pre-requisite(s):** PAS 506, PAS 507, PAS 501, PAS 502, PAS 503, PAS 511, PAS 512, PAS 513, PAS 531, PAS 532, PAS 533, PAS 541, PAS 542, and PAS 543

**PAS 691: Selective I: Surgery / Medicine (4.0 credit hours)**

This required 4-week supervised clinical practice experience under the supervision of the clinical site preceptor is designed to provide students with exposure to pediatric, adult, and/or geriatric patients seeking care for acute, chronic, and emergent medical and/or surgical conditions in the outpatient and/or inpatient settings. Students select either a second supervised clinical practice experience in general surgery, or a surgical subspecialty (such as cardiothoracic, vascular, breast surgery or wound care), critical care (surgical or medical), or an internal medicine subspecialty (such as cardiology, pulmonology, gastroenterology, nephrology) as approved by the Director of Clinical Education. Students selecting orthopedics, general surgery, or a surgical subspecialty will participate in pre-operative, intra-operative, and post-operative patient care. Students will have the opportunity to apply knowledge and skills learned during the Didactic phase of the Program to novel patient encounters and develop Graduate Competencies.

**Pre-requisite(s):** PAS 506, PAS 507, PAS 501, PAS 502, PAS 503, PAS 511, PAS 512, PAS 513, PAS 531, PAS 532, PAS 533, PAS 541, PAS 542, and PAS 543

**PAS 692: Selective II: Surgery / Medicine (4.0 credit hours)**

This is the second of three required 4-week supervised clinical practice experience under the supervision of the clinical site preceptor is designed to provide students with exposure to pediatric, adult, and/or geriatric patients seeking care for acute, chronic, and emergent medical and/or surgical conditions in the outpatient and/or inpatient settings. Students select either a second supervised clinical practice experience in general surgery, or a surgical subspecialty (such as cardiothoracic, vascular, breast surgery or wound care), critical care (surgical or medical), or an internal medicine subspecialty (such as cardiology, pulmonology, gastroenterology, nephrology) as approved by the Director of Clinical Education. Students selecting orthopedics, general surgery, or a surgical subspecialty will participate in pre-operative, intra-operative, and post-operative patient care. Students will have the opportunity to apply knowledge and skills learned during the Didactic phase of the Program to novel patient encounters and develop Graduate Competencies.

**Pre-requisite(s):** PAS 506, PAS 507, PAS 501, PAS 502, PAS 503, PAS 511, PAS 512, PAS 513, PAS 531, PAS 532, PAS 533, PAS 541, PAS 542, and PAS 543

**PAS 693: Selective III: Surgery / Medicine (4.0 credit hours)**

This is the third of three required 4-week supervised clinical practice experience under the supervision of the clinical site preceptor is designed to provide students with exposure to pediatric, adult, and/or geriatric patients seeking care for acute, chronic, and emergent medical and/or surgical conditions in the outpatient and/or inpatient settings. Students select either a second supervised clinical practice experience in general surgery, or a surgical subspecialty (such as cardiothoracic, vascular, breast surgery or wound care), critical care (surgical or medical), or an internal medicine subspecialty (such as cardiology, pulmonology, gastroenterology, nephrology) as approved by the Director of Clinical Education. Students selecting orthopedics, general surgery, or a surgical subspecialty will participate in pre-operative, intra-operative, and post-operative patient care. Students will have the opportunity to apply knowledge and skills learned during the Didactic phase of the Program to novel patient encounters and develop Graduate Competencies.

**Pre-requisite(s):** PAS 506, PAS 507, PAS 501, PAS 502, PAS 503, PAS 511, PAS 512, PAS 513, PAS 531, PAS 532, PAS 533, PAS 541, PAS 542, and PAS 543