## **PA - Physician Associate**

Courses numbered 500 to 799 = undergraduate/graduate. (Individual courses may be limited to undergraduate students only.) Courses numbered 800 to 999 = graduate.

#### PA 525. Special Topics (1-4).

An umbrella course created to explore a variety of subtopics differentiated by letter (e.g., 525A, 525B). Not all subtopics are offered each semester – see the course schedule for availability. Students enroll in the lettered courses with specific topics in the titles rather than in this root course.

#### PA 525C. Special Topics 2020 (0).

Focuses on a discrete area content relevant to the health disciplines. In-depth study of a particular topic or concept, including didactic and current research findings and technological advances relevant to the topic. Open to non-majors. Prerequisite(s): departmental consent.

## PA 700. Clinical Practice I (2).

Provides advanced theoretical knowledge and skills necessary to obtain an appropriate medical history and physical examination. Includes additional emphasis on the identification of normal and abnormal physical findings. Practice of methods and techniques learned takes place in a faculty-proctored laboratory setting. Opportunities are provided for observation and participation in the medical history and physical examination in inpatient and outpatient settings. Prerequisite(s): admission to PA professional program. Corequisite(s): PA 700L.

#### PA 700L. Clinical Practice I Lab (1).

Compliments PA 700 to provide advanced theoretical knowledge and skills necessary to obtain an appropriate medical history and physical examination. Includes additional emphasis on the identification of normal and abnormal physical findings, interpersonal communication, and patient education. Focuses on practicing methods and techniques within a faculty-proctored laboratory setting. *Course includes diversity content.* Prerequisite(s): admission to PA professional program.

#### PA 710. Advanced Pharmacotherapy I (3).

Discusses clinical applications of selected drug classes commonly prescribed in the primary care setting as well as the follow-up management of common chronic diseases. Discusses pharmacological managements as to pharmacokinetics, dosages, mechanisms of action (at molecular and systemic levels), side effects, drug interactions, contraindications, therapeutic use and expected outcomes. Emphasizes the practical application of this knowledge in various patient populations of all ages as well as rational drug selection and monitoring. Methodology includes lecture presentations, group discussions, clinical case studies, assessment of recent literature, homework assignments, quizzes and exams. Prerequisite(s): admission into physician assistant professional program, or HS 301 and instructor's consent.

#### PA 711. Advanced Pharmacotherapy II (3).

Discusses the clinical application of specific categories of drugs used in the treatment of several common acute and chronic diseases. Presents pharmacokinetics, mechanisms of action, dosages, side effects and monitoring parameters of medications as they are used in these diseases and in various patient populations. Facilitates clinical application of this knowledge through case studies, class discussions and reviews of the latest medical literature. Prerequisite(s): PA 710 and either admission into PA professional program or instructor's consent.

#### PA 716. Clinical Laboratory (2).

Provides foundational and advanced knowledge and skills in the efficient selection and rational interpretation of laboratory tests for the purposes of diagnosing and managing common clinical problems. Appropriate test choices, optimum clinical laboratory use, and limitations of tests are emphasized as well as the pathophysiological basis of laboratory tests. Covers core competencies in genetics necessary to incorporate knowledge and skills into routine health care. Prerequisite(s): admission to the PA professional program.

#### PA 717. Professional Issues (1).

Introduces students to a wide variety of issues relevant to PA practice including common legal, ethical and professional concerns facing practicing PAs. Emphasis is placed on health care delivery, cultural competency, health care administration, credentialing, continuing education, medical informantics, advancements in medical technology and end-of-life decisions. Prerequisite(s): admission to the PA professional program.

#### PA 718. Clinical Medicine Cardiology (3).

Advanced pathophysiologic and clinical assessment and management course uses an evidence-based practice approach to develop and integrate knowledge and skills related to the cardiovascular system. Emphasizes normal and abnormal cardiovascular development of pediatric, adult and geriatric patients, major disease pathophysiology, diagnosis, treatment, prognosis and disease prevention as it relates to the cardiovascular system. Prerequisite(s): admission to the PA professional program.

#### PA 719. Clinical Medicine Pulmonology (3).

Advanced pathophysiologic and clinical assessment and management course uses an evidence-based practice approach to develop and integrate knowledge and skills related to the respiratory system. Emphasizes normal and abnormal respiratory development of pediatric, adult and geriatric patients, major disease pathophysiology, diagnosis, treatment, prognosis and disease prevention as it relates to the respiratory system. Prerequisite(s): admission to the PA professional program.

#### PA 721. Clinical Medicine Genitourinary/Renal (2).

Advanced pathophysiologic and clinical assessment and management course uses an evidence-based practice approach to develop and integrate knowledge and skills related to the genitourinary and renal systems. Emphasizes normal and abnormal genitourinary and renal development of pediatric, adult and geriatric patients, major disease pathophysiology, diagnosis, treatment, prognosis and disease prevention as it relates to the genitourinary and renal systems. Prerequisite(s): admission to the PA professional program.

#### PA 722. Clinical Medicine Gastroenterology (3).

Advanced pathophysiologic and clinical assessment and management course uses an evidence-based practice approach to develop and integrate knowledge and skills related to the gastrointestinal system. Emphasizes normal and abnormal gastrointestinal development of pediatric, adult and geriatric patients, major disease pathophysiology, diagnosis, treatment, prognosis and disease prevention as it relates to the gastrointestinal system. Prerequisite(s): admission to the PA professional program.

#### PA 724. Clinical Medicine OB/GYN (3).

Advanced pathophysiologic and clinical assessment and management course uses an evidence-based practice approach to develop and integrate knowledge and skills related to the female reproductive system. Emphasizes normal and abnormal female reproductive development of pediatric and adult patients, major disease pathophysiology, diagnosis, treatment, prognosis and disease prevention as it relates to the female reproductive system and pregnancy. Prerequisite(s): admission to the PA professional program.

## PA 727. Preventive Medicine (2).

Advanced course uses principles of epidemiology, health promotion, and public health research to develop and integrate knowledge and skills related to population-based preventive approaches to health care. Emphasizes behavioral techniques used in making health behavior change, health risk appraisal instruments, health screening, disease and accident prevention, risk factors for major causes of disability, and the distribution and determinants of disease frequency in human populations. Prerequisite(s): admission to the PA professional program.

## PA 728. Clinical Medicine Endocrinology (2).

Advanced pathophysiologic and clinical assessment and management course uses an evidence-based practice approach to develop and integrate knowledge and skills related to the endocrine system. Emphasizes normal and abnormal endocrine development of pediatric, adult and geriatric patients, major disease pathophysiology, diagnosis, treatment, prognosis and disease prevention as it relates to the endocrine system. Prerequisite(s): admission to the PA professional program.

## PA 729. Clinical Behavioral Medicine (2).

Advanced pathophysiologic and clinical assessment and management course uses an evidence-based practice approach to develop and integrate knowledge and skills related to the clinical behavioral medicine. Emphasizes normal and abnormal psychological development of pediatric, adult and geriatric patients, major disease pathophysiology, diagnosis, treatment, prognosis and disease prevention as it relates to behavioral medicine and psychiatry. Prerequisite(s): admission to the PA professional program.

## PA 731. Clinical Medicine Dermatology (2).

Advanced pathophysiologic and clinical assessment and management course uses an evidence-based practice approach to develop and integrate knowledge and skills related to the dermatological system. Emphasizes normal and abnormal dermatological development of pediatric, adult and geriatric patients, major disease pathophysiology, diagnosis, treatment, prognosis and disease prevention as it relates to the dermatological system. Prerequisite(s): admission to the PA professional program.

## PA 732. Clinical Medicine EENT (2).

Advanced pathophysiologic and clinical assessment and management course uses an evidence-based practice approach to develop and integrate knowledge and skills related to the EENT system. Emphasizes normal and abnormal EENT development of pediatric, adult and geriatric patients, major disease pathophysiology, diagnosis, treatment, prognosis and disease prevention as it relates to the EENT system. Prerequisite(s): admission to the PA professional program.

## PA 734. Clinical Medicine Neurology (2).

Advanced pathophysiologic and clinical assessment and management course uses an evidence-based practice approach to develop and integrate knowledge and skills related to the neurological system. Emphasizes normal and abnormal neurological development of pediatric, adult and geriatric patients, major disease pathophysiology, diagnosis, treatment, prognosis and disease prevention as it relates to the neurological system. Prerequisite(s): admission to the PA professional program.

## PA 736. Clinical Practice II (2).

Advances theories and skills learned in PA 700 by emphasizing patient management, evaluation of diagnostic studies, clinical problem solving, evidence-based practice, and critical thinking in both inpatient and outpatient settings. Includes advanced and problem-focused history taking and physical examinations as well as documentation and presentation techniques. Practice of methods and techniques learned takes place in a faculty-proctored laboratory setting. Opportunities are provided for observation and participation in the medical history and physical examination in inpatient and outpatient settings. Prerequisite(s): admission to PA professional program. Corequisite(s): PA 736L.

## PA 736L. Clinical Practice II Lab (1).

Building upon PA 700L, this faculty-proctored laboratory course provides hands-on practice of advanced techniques and methods necessary to obtain an appropriate medical history and physical examination including normal and abnormal physical findings, differential diagnosis, interpretation of diagnostic studies, treatment, prognosis, and disease prevention as it relates to clinical practice. Includes advanced and problem-focused history taking and physical examination as well as documentation and presentation techniques. *Course includes diversity content*. Prerequisite(s): admission to PA professional program.

## PA 741. Clinical Medicine of Bone and Joint Disease (1).

Advanced pathophysiologic and clinical assessment and management course uses an evidence-based practice approach to develop and integrate knowledge and skills related to bone and joint disease. Develops an understanding of normal and abnormal bone and joint development and function, and major bone and joint disease pathophysiology, diagnosis, treatment and prevention in pediatric, adolescent, adult and elderly patients. Prerequisite(s): admission to the PA professional program.

## PA 742. Clinical Medicine Orthopedics (1).

Advanced pathophysiologic and clinical assessment and management course uses an evidence-based practice approach to develop and integrate knowledge and skills related to orthopedics. Emphasizes normal and abnormal musculoskeletal development of pediatric, adult and elderly patients, major disease pathophysiology, diagnosis, treatment, prognosis and prevention as it relates to orthopedics. Prerequisite(s): admission to the PA professional program.

## PA 750. Seminar in PA Competencies (1-12).

Arranged, individual or group directed study pertaining to achieving physician assistant competencies in the areas of medical knowledge, interpersonal skills, patient care skills, professionalism, practice-based learning, and/or system-based practice.

## PA 780. Clinical Skills (1).

Course integrates both didactic and hands-on instruction to develop knowledge and skills required to perform a variety of common medical procedures as well as advanced cardiac life support essential to PA practice. Students must demonstrate competency in these skills. Prerequisite(s): admission to the PA professional program.

## PA 789. Clinical Anatomy (5).

A graduate-level clinical anatomy course that emphasizes an advanced understanding and integration of human anatomy of the back, upper extremity, lower extremity, head, neck, thorax, and gastrointestinal and genitourinary systems. Course material is delivered through a combination of online lecture and cadaver lab instruction. Prerequisite(s): admission to the PA professional program. Corequisite(s): PA 789L.

## PA 789L. Clinical Anatomy Lab (1).

Compliments PA 789 to provide an advanced understanding and integration of human anatomy of the back, upper extremity, lower extremity, head, neck, thorax, and gastrointestinal and genitourinary systems. The laboratory instruction and applied learning involves online lecture, computer-application, anatomical models and human cadaver dissections.

#### PA 800. Research Methods for Evidence-Based Practice (2).

Provides foundational and advanced knowledge and skills regarding research methods to prepare students to develop research studies and locate, appraise and apply health related research to answer clinical questions. Emphasizes principles of evidence-based practice, research ethics, professional and scholarly training, research design and methodologies, framing research questions, and interpretation of basic and advanced statistics necessary to critically evaluate, interpret and apply health care and health policy research to patient/client care and health care systems. Prerequisite(s): admission into physician assistant professional program or instructor's consent.

#### PA 801. Clinical Rotation - Family Medicine (4).

Supervised clinical practice experience that involves the student in comprehensive assessment and decision-making of patients across the lifespan, resulting in detailed treatment and management plans for preventive, acute and chronic conditions commonly encountered in outpatient family medicine. Students are assessed with regards to their competency in medical knowledge, patient care, interpersonal communication, professionalism, practice-based learning and systemsbased practice using standardized objective and subjective measures as related to the program's family medicine learning outcomes. Prerequisite(s): successful completion of the didactic phase of the physician assistant program.

#### PA 802. Clinical Rotation - Pediatric Medicine (4).

Supervised clinical practice experience that involves the student in comprehensive assessment and decision-making of infants, children and adolescents, resulting in detailed treatment and management plans for preventive, acute and chronic conditions commonly encountered in pediatric medicine. Students are assessed with regards to their competency in medical knowledge, patient care, interpersonal communication, professionalism, practice-based learning and systemsbased practice using standardized objective and subjective measures as related to the program's pediatric learning outcomes. Prerequisite(s): successful completion of the didactic phase of the physician assistant program.

#### PA 803. Clinical Rotation - Women's Health (4).

Supervised clinical practice experience that involves the student in comprehensive assessment and decision-making of patients, resulting in detailed treatment and management plans for preventive, emergent, acute and chronic conditions commonly encountered in women's health including prenatal and gynecological care. Students are assessed with regards to their competency in medical knowledge, patient care, interpersonal communication, professionalism, practice-based learning and systems-based practice using standardized objective and subjective measures as related to the program's women's health learning outcomes. Prerequisite(s): successful completion of the didactic phase of the physician assistant program.

#### PA 804. Clinical Rotation - Internal Medicine (4).

Supervised clinical practice experience that involves the student in comprehensive assessment and decision-making of adults and older adults, resulting in detailed treatment and management plans for preventive, emergent, acute and chronic conditions commonly encountered in inpatient/outpatient internal medicine. Students are assessed with regards to their competency in medical knowledge, patient care, interpersonal communication, professionalism, practicebased learning and systems-based practice using standardized objective and subjective measures as related to the program's internal medicine learning outcomes. Prerequisite(s): successful completion of the didactic phase of the physician assistant program.

## PA 805. Clinical Rotation - Behavioral Health (4).

Supervised clinical practice experience that involves the student in comprehensive assessment and decision-making of patients, resulting

in detailed treatment and management plans for preventive, emergent, acute and chronic conditions commonly encountered in behavioral health. Students are assessed with regards to their competency in medical knowledge, patient care, interpersonal communication, professionalism, practice-based learning and systems-based practice using standardized objective and subjective measures as related to the program's behavioral health learning outcomes. Prerequisite(s): successful completion of the didactic phase of the physician assistant program.

#### PA 806. Clinical Rotation - Surgery (4).

Supervised clinical practice experience that involves the student in comprehensive assessment and decision-making of patients, resulting in detailed treatment and management plans for conditions requiring surgical management including preoperative, intraoperative and postoperative care. Students are assessed with regards to their competency in medical knowledge, patient care, interpersonal communication, professionalism, practice-based learning and systemsbased practice using standardized objective and subjective measures as related to the program's surgery learning outcomes. Prerequisite(s): successful completion of the didactic phase of the physician assistant program.

#### PA 807. Clinical Rotation - Emergency Medicine (4).

Supervised clinical practice experience that involves the student in comprehensive assessment and decision-making of patients across the lifespan, resulting in detailed treatment and management plans for emergent, acute and chronic conditions commonly encountered in the emergency department setting. Students are assessed with regards to their competency in medical knowledge, patient care, interpersonal communication, professionalism, practice-based learning and systemsbased practice using standardized objective and subjective measures as related to the program's emergency medicine learning outcomes. Prerequisite(s): successful completion of the didactic phase of the physician assistant program.

#### PA 808. Clinical Rotation - Elective I (4).

Supervised clinical practice experience in one of several electives including general core rotation areas as well as subspecialty areas of medicine and surgery. The rotation involves the student in comprehensive assessment and decision-making resulting in detailed treatment and management plans for conditions commonly encountered in the selected setting. Students are assessed with regards to their competency in medical knowledge, patient care, interpersonal communication, professionalism, practice-based learning and systems-based practice using standardized objective and subjective measures as related to the program's learning outcomes. Prerequisite(s): successful completion of the didactic phase of the physician assistant program.

## PA 809. Clinical Rotation - Elective II (1-3).

Supervised clinical practice experience in one of several electives including general core rotation areas as well as subspecialty areas of medicine and surgery. The rotation involves the student in comprehensive assessment and decision-making resulting in detailed treatment and management plans for conditions commonly encountered in the selected setting. Students are assessed with regards to their competency in medical knowledge, patient care, interpersonal communication, professionalism, practice-based learning and systemsbased practice using standardized objective and subjective measures as related to the program's learning outcomes. Prerequisite(s): successful completion of the didactic phase of the PA program. Repeatable for credit.

## PA 834. Interprofessional Evidence-Based Practice (1).

Cross-listed as CSD 834. This interprofessional course uses small group discussion and practical exercises to advance skills in evidencebased practice, interpersonal skills, critical thinking, leadership and teamwork. Students practice a patient-centered approach to integrate clinical expertise and patient preferences/values with the best available health evidence to optimize individual healthcare, public health outcomes and healthcare systems. Students practice and develop skills in interprofessional consultations and patient education. This course assumes advanced knowledge and skills in research methods and evidence-based practice. Prerequisite(s): admission into PA or CSD graduate program.

# PA 850. Experiential Learning in Professionalism, Service, Research and Interprofessional Collaboration (1).

Encourages students to integrate and enhance personal development of key physician assistant competencies such as professionalism, interpersonal skills, patient care skills, compassion, sensitivity to diversity, and practice-based learning through experiential learning activities followed by reflection and discussion. Students engage in a variety of required and elective faculty-led and student-led activities within the categories of: (1) professionalism, (2) service-learning/ community service, (3) research/evidence-based practice and lifelong learning, and (4) interprofessional patient-centered teamwork. *Course includes diversity content*.

#### PA 896. Directed Study Research I (2).

First in a series of two courses in which students work with an assigned faculty adviser to plan and develop the required master's-level evidence-based project, paper, and oral defense. Prerequisite(s): admission to the PA professional program.

## PA 897. Directed Study Research II (2).

Second in a series of two courses in which students work with an assigned faculty adviser to complete and finalize the required master's-level evidence-based project, paper, and oral defense. Prerequisite(s): PA 896, admission to the PA professional program.