

# PHYSICIAN ASSISTANT STUDIES (PAST)

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## **PAST 401. Foundations of Clinical Medicine-Principles of Interviewing. 3 Units.**

The general purpose of this course is to teach the physician assistant student the skills necessary to conduct a clinical/medical interview with a patient and to be able to present the information to other health care professionals in both an oral and written form. This course, which is designed as small, group seminars, will focus on the skills necessary to question patients in a directed fashion and to listen to the patient with concern and empathy. Instruction will emphasize what data is needed in a complete medical history as well as the focused interview, the proper technique for gathering information, and the format for presentation of the data. Instructional techniques will include role-playing, small group discussion, and observation and critique by instructors, other students and simulated patient models. Prereq: Students must be in Physician Assistant Program.

## **PAST 402. Physical Diagnosis. 4 Units.**

This lecture/discussion/laboratory course presents and explores the techniques for performing a complete and competent physical examination, understanding the pathophysiology presented by the patient, and organizing and reporting the findings in both written and oral format. Synthesis of historical and physical presentations for an accurate evaluation of the patient will be emphasized. The problem-oriented physical examination and special examination tools and techniques will be presented. Instructional techniques will include small group discussion, practical experience with other students and faculty, and the observation and critique of physical examination skills by faculty. Prereq: Students must be in Physician Assistant Program.

## **PAST 403. Diagnostic Methods-Clinical Lab. 1 Unit.**

This course is designed to introduce the student to clinical laboratory and diagnostic medicine. Lectures are designed to review the various types of laboratory tests, acquisition and handling of specimens, normal values as well as interpretation of results and correlation with clinical conditions. This course also includes an introduction to radiology, microbiology and electrocardiogram interpretation. The skills learned here carry over to the principles of medicine series in subsequent semesters. Prereq: Students must be in Physician Assistant Program.

## **PAST 404. Clinical Correlations. 1 Unit.**

This seminar course places emphasis on internal organs with clinical correlation to anatomic conditions. Content will include basic concepts of genetics, the comparison of normal and abnormal structural relationships and the demonstration of how these things relate to health and disease. Students will review on-line genetics learning modules and meet in small seminar groups to review anatomical clinical correlates. Prereq: Students must be in Physician Assistant Program.

## **PAST 405. Medical Microbiology & Infectious Disease. 2 Units.**

This course is the study of microorganisms and the diseases they cause in man. It includes consideration of infectious disease microorganisms including their biochemical, serological and virulence characteristics, and clinical manifestations. An organ system approach is used to examine the fundamentals of pathogenicity, host response, epidemiological aspects of infectious disease, as well as clinical manifestations, diagnosis and treatment of infections with clinical correlations. Prereq: Students must be in Physician Assistant Program.

## **PAST 406. Ethics in Healthcare Delivery. 1 Unit.**

This course is an overview of the discipline of medical ethics presenting the study and application of relevant principles, insights, and understandings of modern medical practice. The course includes a brief overview of ethical theories which lay the foundation for subsequent investigation into specific ethical problems found in medical science and technology. The purpose of the course is to provide a framework which enables the student to reason clearly and effectively about the ethics involved in medical science and technology. The course assumes no prior knowledge of philosophical ethics or medical science. A framework of ethical decision making is introduced and practiced using realistic medical cases via seminar discussion. Prereq: Students must be in Physician Assistant Program.

## **PAST 407. Clinical Procedures. 4 Units.**

The purpose is to prepare these future clinicians for clinical management of health and disease by preparing them for common clinical procedures. These will include basic and advanced surgical skills, basic laboratory skills, common out-patient procedures, common emergency procedures, and interpretation of common radiologic tests. Prereq: Students must be in Physician Assistant Program.

## **PAST 410. Cadaver Dissection-based Human Anatomy with Histology and Physiologic Correlations. 6 Units.**

This course will provide students with a sound understanding of the normal human body as a foundation for subsequent pursuing biomedical careers. The gross anatomy component will give a full breakdown of all gross aspects of the human body and the associated systems, while also including cadaver dissection-based laboratories. The histology component will provide students with an understanding of the structural and functional organization of the human body at the cellular and subcellular levels. The embryology component will briefly discuss the major systems and how they form within a developing embryo. This course is well-suited to all biomedical careers, including pre-clinical and biomedical undergraduates, post-baccalaureate, pre-clinical master of science graduate programs, plus medical and dental students seeking additional training in the anatomical sciences. It will meet any of the anatomy-oriented prerequisites being implemented for medical and dental school applications, including those preferring or requiring a cadaver-based experience. The assessments will include a combination of written and cadaver-based practical questions. Offered as ANAT 410 and PAST 410. Prereq: Students must be in Physician Assistant Program.

## **PAST 411. Professional Issues for PA's-History & Roles of the PA I. 1 Unit.**

In this three course series students explore, through lecture and discussion, the factors affecting the development of the profession and role socialization with emphasis on history and regulations/organizations governing PA practice. An overview of clinical responsibilities, team based practice, the PA role, and licensing/credentialing practices will be presented and discussed. Prereq: Students must be in Physician Assistant Program.

## **PAST 412. Professional Issues for Physician Assistants II. 2 Units.**

In this three course series students will explore factors affecting the development of the profession, the status of the PA in the U.S. healthcare system and current issues in clinical practice including practice-based improvement and systems-based practice. Through lecture and discussion, this series prepares the student for the transition from classroom to clinical training and clinical practice. Emphasis is given to the responsibilities that come with being a professional, professionalism and practicing quality improvement. Prereq: Students must be in Physician Assistant Program.

**PAST 413. Professional Issues for Physician Assistants III. 2 Units.**

In this three course series students will explore factors affecting the development of the profession, the status of the PA in the U.S. healthcare system and current issues in clinical practice including practice-based improvement and systems-based practice. Through lecture and discussion, this series prepares the student for the transition from classroom to clinical training and clinical practice. Emphasis is given to the responsibilities that come with being a professional, professionalism and practicing quality improvement. Prereq: Students must be in Physician Assistant Program.

**PAST 420. Pharmacology I. 2 Units.**

In this two course series, (PAST 421 Pharmacology II) students will be provided with a basic introduction to the principles of pharmacology and to drug classes of particular relevance to the physician assistant. Information concerning drug doses and calculations used in determining doses will be included in this course and PAST 421 Pharmacology. Prereq: Students must be in Physician Assistant Program.

**PAST 421. Pharmacology II. 3 Units.**

In this two course series (PAST 420 Pharmacology), physician assistant students will be provided with foundational knowledge of the therapeutic uses and effects of drugs. The indications, contraindications and adverse effects of prototypical drugs are covered. Drug dependence and addiction are also discussed. This course also includes a problem-based learning component which will enhance students' teamwork and clinical reasoning skills by examining and analyzing case scenarios in small groups. Prereq: Students must be in Physician Assistant Program.

**PAST 430. Principles of Internal Medicine. 7 Units.**

This one semester lecture/discussion course provides students with a detailed study of the etiology, pathophysiology, signs, symptoms, diagnosis and treatment of various disorders encountered in internal medicine. A broad array of diseases in cardiology, dermatology, endocrinology, gastroenterology, gerontology, hepatology, hematology, oncology, urology, nephrology, neurology, pulmonology and rheumatology are explored. Prereq: Students must be in Physician Assistant Program.

**PAST 431. Principles of Clinical Medicine-Surgery & Emergency Medicine. 4 Units.**

This one semester lecture course presents the fundamentals of surgical disease and care of the acutely injured and ill patients. The purpose is to familiarize the student with the etiology, anatomy, pathophysiology, clinical manifestations and appropriate diagnosis and treatment of selected surgical conditions and conditions encountered in the surgical subspecialty and emergency medical settings. Prereq: Students must be in Physician Assistant Program.

**PAST 432. Principles of Clinical Medicine-OB/GYN. 3 Units.**

This lecture/case presentation course gives the student an overview of commonly encountered obstetric and gynecologic disorders. Anatomy and physiology of the human reproduction system are examined, including the changes in pregnancy, prenatal care, medical and surgical complications of pregnancy, pre- and postpartum care. Common gynecologic conditions, methods and effectiveness of contraception, cancer detection methods and the diagnosis and treatment of sexually transmitted infections in the female are explored. Prereq: Students must be in Physician Assistant Program.

**PAST 433. Principles of Clinical Medicine-Pediatrics. 3 Units.**

This course introduces the student to a unique, complex and challenging field of pediatrics. It emphasizes aspects of general pediatrics and provides a foundation for those students who elect to further study the health care of infants, children and adolescents. This course addresses issues unique to childhood and adolescence by focusing on human developmental biology, and by emphasizing the impact of family, community, and society on child health and well-being. Additionally, it focuses on the impact of disease and its treatment on the developing human, and emphasizes growth and development, principles of health supervision, and recognition of common health problems. Prereq: Students must be in Physician Assistant Program.

**PAST 434. Principles of Clinical Medicine-Behavioral Medicine. 2 Units.**

This one semester course gives students an overview of some of the most important areas in behavioral psychiatry. This course is an overview of basic psychiatric concepts and focuses on assessing patients who manifest psychological symptoms. Topics include diagnosis and treatment of anxiety disorders, mood disorders, common child and adolescent disorders, somatoform and factitious disorders, psychotic disorders, sleep disorders, adjustment and personality disorders, and drug and alcohol abuse and addresses forensic issues in behavioral health. Prereq: Students must be in Physician Assistant Program.

**PAST 440. Pre-Clinical Clerkships I. 1 Unit.**

This course/clerkship provides the student with clinical experience at clinical sites in the didactic year utilizing what was learned in Foundations of Clinical Medicine (Interviewing and Physical Diagnosis class/lab). During the pre-clinical time at program designated sites, students will continue to develop and apply their history and physical exam skills, interpersonal skills, oral presentation and medical documentation skills. For expanding skills and creating relationships within the community, this course also encompasses community service, experiential learning and interprofessional education activities. This course/clerkship will help to better prepare students to gain experience and develop confidence in approaching patients prior to entering the clinical year. Prereq: Students must be in Physician Assistant Program.

**PAST 441. Pre-Clinical Clerkships II. 1 Unit.**

This course/clerkship provides the student with clinical experience at clinical sites in the didactic year utilizing what was learned in Foundations of Clinical Medicine (Interviewing and Physical Diagnosis class/lab). During the pre-clinical time at program designated sites, students will continue to develop and apply their history and physical exam skills, interpersonal skills, oral presentation and medical documentation skills. For expanding skills and creating relationships within the community, this course also encompasses community service, experiential learning and interprofessional education activities. This course/clerkship will help to better prepare students to gain experience and develop confidence in approaching patients prior to entering the clinical year. Prereq: Students must be in Physician Assistant Program.

**PAST 450. Culture and Health. 2 Units.**

This lecture/discussion course provides students with a detailed understanding of the societal and individual prejudices, preconceptions, and biases that enter into the clinical interaction and how to develop appropriate responses and coping strategies. This course provides the student with common psychosocial problems encountered by health professionals today. Students explore issues related to sexuality, cultural competency, multicultural health, cross-cultural communication, and healthcare disparities. Prereq: Students must be in Physician Assistant Program.

**PAST 451. Introduction to Public Health. 1 Unit.**

This course will introduce students to concepts of public health and provide experience in public health by completion of a project. The course will enhance the student's knowledge of the history and philosophy of public health, the Healthy People 2030 initiatives and the social determinants of health and how they can be impacted. Teaching methodologies will include discussion, lecture and development of a public health project. Prereq: Students must be in Physician Assistant Program.

**PAST 452. Introduction to Evidence Based Medicine. 2 Units.**

This course is intended to provide learners with a basic understanding of the principles of epidemiology, biostatistics and evidence-based medicine. The course involves analysis of prospective and retrospective studies, cross-sectional studies and experimental epidemiology. It will focus on epidemiological scenarios that relate to both infectious disease and chronic disease. In addition, the course will provide the student with a basic understanding of the application of statistical techniques to the biological and health sciences and to demonstrate their areas of application. Emphasis will be placed on probability laws, sampling and parameter estimation, test of hypothesis, correlation, regression and analysis of variance. Finally, students will be introduced to the basic concepts of evidence-based medicine, information mastery, and critical appraisal of the medical literature. Prereq: Students must be in Physician Assistant Program.

**PAST 453. Medical Spanish Elective. 1 Unit.**

This course will teach students the basics of Spanish as it applies to the medical field such as physical examinations, emergencies, common diseases within the Latino population, and specializations. By familiarizing students with conversational Spanish and medical Spanish, this course will enable students to apply their learning to real-world situations, to assist in communications, and ultimately to break down the barrier between doctors and patients. Prereq: Students must be in Physician Assistant Program.

**PAST 454. Research Methods Elective. 1 Unit.**

This lecture course introduces students to research design and scientific inquiry and provides them with the skills necessary for interpretation and critical evaluation of the medical literature. It includes a brief review of important statistical principles and methods and their application to problems in medicine and health. Prereq: Students must be in Physician Assistant Program.

**PAST 477. Human Physiology. 4 Units.**

This lecture/seminar course takes a systems approach to the physiologic and biochemical functions of the human body, including relevant anatomical correlations. The goal is to enhance the student's fundamental knowledge in human physiology with an emphasis on physiologic concepts in relationship to health, disease and illnesses. The course will provide students with an understanding of the function, regulation and integration of the major organ systems. Small group seminars emphasize clinical application to systemic function. Prereq: Students must be in Physician Assistant Program.

**PAST 499. Independent Study. 0 Unit.**

This course offers a unique opportunity for students to work one-on-one with a physician assistant faculty member and explore topics related to Supervised Clinical Practice Experiences (SCPEs) for Clinical Residencies of: Emergency Medicine, Family Medicine, Geriatrics, Internal Medicine, Obstetrics and Gynecology, Pediatrics, Behavioral and Mental Health, Surgery, Primary Care Elective, Inpatient Medicine Elective, and General Electives. This independent study course is designed to complement and enhance the hands-on experience gained during previous SCPEs.

**PAST 500. Clinical Residency: Emergency Medicine. 3 Units.**

This clinical rotation is designed to expose the student to the wide variety of problems encountered in the hospital-based emergency room setting in both the fast track and acute care sides of the emergency department. The rotation experience includes the medical/surgical management of patients of all ages (infant to geriatric) with presenting problems that may be of a life threatening nature. The formulation and understanding of the many and varied medical problems is accomplished via the accurate collection of data through a history and physical exam, interpretation of diagnostic testing, and the development of a plan. The student will also be exposed to and perform diagnostic and therapeutic procedures. These experiences will be under appropriate supervision. Prereq: Students must be in Physician Assistant Program.

**PAST 501. Clinical Residency: Family Medicine. 3 Units.**

This clinical rotation is designed to give the student an understanding of family medicine/primary care medicine as practiced in office and/or clinic in an outpatient setting. The student will work with patients from a variety of social, economic and cultural backgrounds across the lifespan. They will experience continuity of care while assessing, diagnosing, monitoring, managing, referring and educating patients. The student will be exposed to both acute and chronic problems as well as the psychosocial problems that are encountered in this setting. Students may encounter and participate in the care of patients of all ages: pediatric, adolescent, adult and geriatric populations. The formulation and understanding of the many and varied medical problems is accomplished via the accurate collection of data through a complete history and physical exam, interpretation of diagnostic testing, formulation of a problem list, and the development of a plan for each presenting problem. Prereq: Students must be in Physician Assistant Program.

**PAST 502. Clinical Residency: Geriatrics. 3 Units.**

This clinical rotation is designed to give the student an understanding of geriatric medicine. The understanding of the many and varied medical and psycho-social problems in geriatric patients is accomplished via the accurate collection of data through a complete history and physical examination, interpretation of diagnostic testing, formulation of a problem list, and the development of a plan for each presenting problem. Teaching rounds and lectures may be used to introduce concepts of geriatric medicine. Prereq: Students must be in Physician Assistant Program.

**PAST 503. Clinical Residency: Internal Medicine. 3 Units.**

This clinical rotation is designed to provide the student with an understanding of the wide variety of problems encountered in hospital-based internal medicine. The formulation and understanding of the many and varied medical problems is accomplished via the accurate collection of data through a complete history and physical exam, interpretation of diagnostic testing, formulation of a problem list, and the development of a plan for each presenting problems. Students are assigned to medical teams during their rotation. Teaching rounds and lectures are used to introduce concepts of internal medicine. Prereq: Students must be in Physician Assistant Program.

**PAST 504. Clinical Residency: Obstetrics & Gynecology. 3 Units.**

This clinical rotation is designed to expose the student to the variety of problems encountered in women's health care. The focus of the learning experience is on recognition and management of common gynecological illnesses, sexually transmitted infections, family planning, birth control, and cancer of the female reproductive system and breast. Obstetrical focus is on pregnancy, labor and delivery, and postpartum care. The student will also have an exposure to the surgical management of gynecological and obstetric problems. Teaching rounds and lectures may be used to introduce concepts of obstetrics and gynecology. Prereq: Students must be in Physician Assistant Program.

**PAST 505. Clinical Residency: Pediatrics. 3 Units.**

This clinical rotation is designed to emphasize care of the child from birth to adolescence. The focus of the learning experience is on recognition and management of common childhood illnesses, assessment of variations of normal growth and development, and the counseling of parents regarding immunizations, preventative health care visits, growth and development, nutrition, injury prevention and common psychosocial problems. The formulation and understanding of the many and varied medical problems is accomplished via the accurate collection of data through a complete history and physical exam, interpretation of diagnostic testing, formulation of a problem list, and the development of a plan for each presenting problem. Teaching rounds and lectures may be used to introduce concepts of pediatrics. Prereq: Students must be in Physician Assistant Program.

**PAST 506. Clinical Residency: Behavioral and Mental Health. 3 Units.**

This clinical rotation is designed to give the student an understanding of the psycho-social and behavioral components of health, disease, and disability. The student will be exposed to a variety of mental illnesses and disabilities and will also be able to recognize and categorize psychiatric disorders along with the therapeutic modalities used in their treatment. The formulation and understanding of the varied psychiatric problems is accomplished via the accurate collection of data through a complete history and mental status exam, interpretation of diagnostic testing when appropriate, formulation of a problem list, and the development of a plan for each presenting problem. Emphasis is placed on early recognition, intervention, and psychiatric referral and/or consultation. Teaching rounds and lectures are used to introduce concepts of psychiatric medicine. Prereq: Students must be in Physician Assistant Program.

**PAST 507. Clinical Residency: Surgery. 3 Units.**

This clinical rotation is designed to expose the student to the varied population with surgically manageable disease from adolescence to geriatrics. The formulation and understanding of the varied medical problems is accomplished via the accurate collection of data through a complete history and physical exam, interpretation of diagnostic testing, formulation of a problem list, and the development of a plan. The focus of the learning experience is on the pre-operative evaluation and preparation of the patients for surgery, procedures and assisting during the intra-operative period, and the care of patients post-operatively. The student will be exposed to both emergent and non-emergent surgical management of patients. The student may be assigned to surgical teams during his/her rotation. Teaching rounds and lectures are used to introduce concepts of surgical care. Prereq: Students must be in Physician Assistant Program.

**PAST 508. Clinical Residency: Primary Care Elective. 3 Units.**

This clinical rotation is designed to give the student an understanding of family medicine/primary care medicine as practiced in office and/or clinic in an outpatient setting. The student will work with patients from a variety of social, economic and cultural backgrounds across the lifespan. They will experience continuity of care while assessing, diagnosing, monitoring, managing, referring and educating patients. The student will be exposed to both acute and chronic problems as well as the psychosocial problems that are encountered in this setting. Students may encounter and participate in the care of patients of all ages: pediatric, adolescent, adult and geriatric populations. The formulation and understanding of the many and varied medical problems is accomplished via the accurate collection of data through a complete history and physical exam, interpretation of diagnostic testing, formulation of a problem list, and the development of a plan for each presenting problem. Prereq: Students must be in Physician Assistant Program.

**PAST 509. Clinical Residency: Inpatient Medicine Elective. 3 Units.**

This clinical rotation is designed to provide the student with an understanding of the wide variety of problems encountered in hospital-based internal/surgical medicine. The formulation and understanding of the many and varied medical and or surgical problems is accomplished via the accurate collection of data through a complete history and physical exam, interpretation of diagnostic testing, formulation of a problem list, and the development of a plan for each presenting problem. Students are assigned to medical teams during their rotation. Teaching rounds and lectures are used to introduce concepts of hospital based medicine. Prereq: Students must be in Physician Assistant Program.

**PAST 510. Clinical Residency: Elective. 3 Units.**

This elective clinical rotation is designed to provide the student with the knowledge and skills in an area of interest. Students will gain an understanding of the variety of problems encountered in a medical or surgical sub-specialty discipline. The formulation and understanding of the many and varied medical and/or surgical sub-specialty problems is accomplished via the accurate collection of data through a complete history and physical exam, interpretation of diagnostic testing, formulation of a problem list, and the development of a plan for each presenting problem including pharmacologic and non-pharmacologic management. Acquisition of these skills helps facilitate the PA student to progress through the clinical rotation with increasing complexity of clinical experiences, building confidence, competence and compassion. In addition to gaining clinical skills specific to the specialty of the rotation, the student will also continue to develop skills in systematic medical problem solving and patient management abilities, establish or reinforce patterns of independent learning, self-evaluation, interprofessional relationships and communication skills. Elective rotation sites are chosen based on practice characteristics that are important for the PA student within this rotation. These may include practice location, patient populations, and availability of specific experiences and procedures. Prereq: Students must be in Physician Assistant Program.



**PAST 511. Clinical Residency: Elective. 3 Units.**

This elective clinical rotation is designed to provide the student with the knowledge and skills in an area of interest. Students will gain an understanding of the variety of problems encountered in a medical or surgical sub-specialty discipline. The formulation and understanding of the many and varied medical and/or surgical sub-specialty problems is accomplished via the accurate collection of data through a complete history and physical exam, interpretation of diagnostic testing, formulation of a problem list, and the development of a plan for each presenting problem including pharmacologic and non-pharmacologic management. Acquisition of these skills helps facilitate the PA student to progress through the clinical rotation with increasing complexity of clinical experiences, building confidence, competence and compassion. In addition to gaining clinical skills specific to the specialty of the rotation, the student will also continue to develop skills in systematic medical problem solving and patient management abilities, establish or reinforce patterns of independent learning, self-evaluation, interprofessional relationships and communication skills. Elective rotation sites are chosen based on practice characteristics that are important for the PA student within this rotation. These may include practice location, patient populations, and availability of specific experiences and procedures. Prereq: Students must be in Physician Assistant Program.

**PAST 600. Capstone Quality Improvement Project & Comprehensive Examination. 3 Units.**

The Quality Improvement (QI) Project (PAST 600 Capstone) is one of two major components of the capstone of the PA program. This component of the PAST 600 Capstone course provides students with clinical practice opportunities to synthesize practice based improvement knowledge and skills through participation in evaluation of practice based quality improvement projects and quality measures. The Capstone Quality Improvement evaluation project is conducted over the course of the year. The Comprehensive Examination (PAST 600) is the summative evaluation and the second of two major components of the capstone of the PA program. The purpose of the exam is to determine whether the student has been able to integrate knowledge and skills obtained from individual courses (didactic and clinical) into unified concepts and demonstrate the acquisition of the competencies needed for entry into clinical practice. Consisting of a written exam, oral exam and an OSCE, the Comprehensive Examination measures the learner's knowledge, interpersonal skills, patient care skills and professionalism required to enter clinical practice. It is conducted within the final four months of the program. Prereq: Students must be in Physician Assistant Program.