
GRADUATE PROGRAM IN PHYSICIAN ASSISTANT STUDIES

PROGRAM PHILOSOPHY AND CONTENT

The graduate program in Physician Assistant Studies (PA) operates on a semester calendar. Summer, fall and spring semester are completed in a predetermined sequence. Classes and labs typically meet in during the day, with an occasional evening class. Students must begin the program during the summer session.

PROGRAM STANDARDS AND POLICIES

Physician Assistant students are responsible for developing a master portfolio under the advisement of a faculty member. This portfolio includes written works in case presentations, service learning, professional growth experiences and a project in performance improvement. The performance improvement project includes active learning and the application of learning to improve the practice of medicine, a current standard implemented by the physician assistant profession. This project will be done in partnership with a preceptor/office practice that the student has completed a rotation with; the project will include comparison of some aspect of practice to national benchmarks, performance guidelines or other established evidence-based metric or standard. Based on the comparison, the student will develop and implement a plan for improvement in that area. To example the project, a practice might be interested in improving how they counsel on smoking cessation in the adult patient population. The student would develop counseling guidelines in line with current evidence based standards and the course of implementation for the practice to carry out. This can then be further evaluated over time by the practice to meet current performance improvement as mandated by the profession.

GRADUATE PROGRAM IN PHYSICIAN ASSISTANT STUDIES

The Master of Science degree program in Physician Assistant Studies is a 24 month graduate program. The curriculum sequences students through 12 months of didactic curriculum and 12 months of clinical experiences. The curriculum has been developed to meet standards set forth by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA).

Mercyhurst University has applied for Accreditation - Provisional from the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA). Mercyhurst University anticipates matriculating its first class in June 2014, pending Accreditation - Provisional in March 2014. Accreditation - Provisional is an accreditation status for a new PA program that has not yet enrolled students, but at the time of its initial accreditation review, has demonstrated its preparedness to initiate a program in accordance with the accreditation Standards.

The curriculum sequencing commences with a summer session of basic science review, introductory course work and the beginning of clinical skills education. The didactic year fall and spring semesters present the health care sciences in a medical model. During the didactic year students also have intermittent exposure to the community via experiences in hospital, nursing home and physician offices.

The clinical year consists of clinical experiences in internal medicine, pediatrics, women's health care, surgery, emergency medicine and two elective rotations. Students return to campus for the last two days of the rotation for debriefing of the experience, clinical and written testing, case presentations and didactic instruction in current medical topics.

Mercyhurst University has developed a graduate degree in Physician Assistant Studies to meet the demands for the profession. PA's provide high quality, cost-effective healthcare and are productive members of the health care team. The physician assistant profession is in a continued growth pattern with an estimated increase of 30 percent from 2010-2020 per the U.S. Bureau of Labor Statistics Occupational Outlook Handbook. This growth is much faster than the average for most professions. Employment opportunities for PA's are predicted to be excellent and Mercyhurst will offer it's PA graduates the opportunity to be to be leaders in the profession, proficient in meeting the challenges of healthcare while providing compassionate, quality care to the diverse communities in which they serve.

ADMISSIONS REQUIREMENTS

Applicants must have a bachelor's degree from an accredited college/university, or evidence of expected completion of a bachelor degree at the time of application.

Minimum GPA of 3.2 for undergraduate work and a minimum of 3.0 or higher in prerequisite courses.

Prerequisite Courses:

Biology with labs	8 credits
Chemistry with labs (General and Organic)	12 credits
Anatomy with lab	4 credits
Physiology with lab	4 credits
Microbiology with lab	4 credits
Genetics	3 credits
Statistics	3 credits
Psychology	3 credits
Nutrition	3 credits
Medical Terminology	2-3 credits

- Applicants must have a "C" or better in all science courses. Courses taken as pass/fail or for noncredit will not be accepted.
- A minimum of 8 credits of the prerequisite courses must be completed within a 5 year time frame at matriculation, with the remaining prerequisite courses to have been completed within a 10 year time frame at matriculation.
- 200 hours of health care experience (paid or volunteer).
- GRE – scores will be reviewed and used in the application process.
- Applicants are required to supply 3 letters of recommendation.

- Applicants must submit a succinct essay that discusses professional goals in reference to the physician assistant profession.
- All course work in the program must be taken in sequence. Transfer/advanced placement or life experience credit will not be offered.
- International students must submit official, notarized scores from the TOEFL (Test of English as a Foreign Language) exam and must meet the minimum score requirement of 550 for the paper based test and 79-80 for the internet-based test.
- Entry into the program will be based on the completion of prerequisites, interview and space availability.
- Preference will be given to equally qualified Mercyhurst graduates.

Curriculum:

DIDACTIC YEAR/1st YEAR

Summer:

Anatomy w/lab	5 credits
Physiology	3 credits
Microbiology	2 credits
Clinical Skills (history and physical exam skills)	3 credits
Clinical Skills Lab 1	1 credit
PA Profession	1 credit
Research Methods	2 credits

Total credits 17

Fall:

Clinical Skills Lab 2	1 credit
Clinical Medicine 1	6 credits
Pharmacotherapeutics 1	3 credits
Psychology in Healthcare	3 credits
Women's Health	2 credits
Pediatrics	2 credits
Special Topics in Medicine (to include Diversity, Ethics, ARC-PA essentials)	1 credit

Total credits 18

Spring:

Clinical Medicine 2	6 credits
Pharmacotherapeutics 2	3 credits
Evidence Based Medicine	1 credit
Healthcare Policy	2 credits
Genetics	1 credit
Emergency Medicine and Surgery (to include ACLS/CPR/PALS)	4 credits
Procedures in Medicine (Suturing, casting/splints, injections)	1 credit

Total credits 18

CLINICAL YEAR/2nd YEAR

Summer:

Rotation I - Internal Medicine	5 credits
Rotation II - Family Practice	5 credits
Thesis Guidance	2 credits

Total credits 12

Fall:

Rotation III - Women's Health	5 credits
Rotation IV - Pediatrics	5 credits
Rotation V - Emergency Medicine	5 credits

Total credits 15

Spring:

Rotation VI - Surgery	5 credits
Rotation VII - Elective	5 credits
Rotation VIII - Elective	4 credits
Rotation IX - Mental Health	1 credit
Summative Evaluation Experience	2 credits

Total credits 17

Rotations will be 4-5 weeks in length with Testing/Review days the last 2 days of the rotation. Students will be required to be on campus for written/clinical testing, lectures and presentations.

DIDACTIC YEAR**Anatomy w/lab****5 credits**

This course is designed to prepare the student for clinical practice with an understanding of functional human anatomy. The course will detail anatomy and histology of all organ systems of the human body in a regional prospective. The laboratory component is designed to demonstrate through models, microscopic work and cadaver dissection/prosection.

Physiology**3 credits**

This course is presented to correlate the basic sciences to the study of clinical medicine. It is presented in the first semester as a foundation for the clinical medicine courses to follow. The course will focus on an in-depth study of the mechanisms by which the human body functions. The main focus of the course is on the various strategies used to maintain homeostasis and the ways in which the activities of tissues, organs, and organ systems are regulated by neural inputs, endocrine secretions and cellular-level events.

Microbiology**2 credits**

The course presents the study of bacteria and other microbes with emphasis on their structure and function in human disease, ecology, biochemistry and research methodologies. The course reviews the biology of microbes and their use as biological and medical research tools.

Clinical Skills**3 credits**

This course is designed to teach medical interviewing techniques, patient history gathering, communication skills and physical examination techniques to include normal and variant physical findings and examination techniques. Clinical Skills Lab (1 credit)

This lab experience will focus on the application of theory presented in Clinical Skills to include communication and interviewing techniques in the gathering of historical patient data, the performance of physical exam techniques, simulated patient encounters and skills testing.

Clinical Skills Lab 2**1 credit**

This lab experience will focus on the application of communication and interviewing techniques in the gathering of historical patient data, the performance of physical exam techniques, via simulated patients in detail with case based scenarios, patient experiences in office, hospital, long term care and behavioral health settings.

Clinical Medicine 1**6 credits**

This course will follow a systems approach to introduce common diseases and syndromes including focus on etiology, epidemiology, underlying pathophysiology to include signs and symptoms, differential diagnosis, patient evaluation with the selection, use and interpretation of results of laboratory and diagnostic studies and basic therapeutic concepts. The comparison of the clinical presentation and management of disease states in the geriatric population vs. the general population will be of focus. Appropriate preventive health care, patient education and health maintenance recommendations will be presented. The application of the principles evidence based clinical practice will also be utilized.

Clinical Medicine 2**6 credits**

This course is a continuation of Clinical Medicine I and will follow a systems approach to introduce common diseases and syndromes including focus on etiology, epidemiology, underlying pathophysiology to include signs and symptoms, differential diagnosis, patient evaluation with the selection, use and interpretation of results of laboratory and diagnostic studies and basic therapeutic concepts. The comparison of the clinical presentation and management of disease states in the geriatric population vs. the general population will be of focus. Appropriate preventive health care, patient education and health maintenance recommendations will be presented. The application of the principles evidence based clinical practice will also be utilized.

PA Profession**1 credit**

This course will focus on the introduction to the program curriculum and requirements of masters' portfolio, the history of the profession, current topics on professional, legal and ethical issues in health care that effect Physician Assistant practice. Topics will also include topics important to the Physician-PA health care team, such as PA professional credentialing, professional organizations, leadership, interdisciplinary approach in medicine and the balance of life, employment and stress to avoid burnout.

Research Methods for Health Professions**2 credits**

This course introduces students to experimental and observational study designs commonly used in health research. Students will learn about research design, conduct, analysis and dissemination. Research designs discussed will include randomized clinical trials, cohort studies (prospective and retrospective) and case control studies. Students will learn to search the medical literature and find sources and information using PubMed and they will learn how to interpret and understand contemporary medical research.

Pharmacotherapeutics 1**3 credits**

This course will concentrate on the clinical principle pharmacotherapeutics of pharmacokinetics, drug metabolism, drug interactions and adverse reactions, applications of drug for various organ systems integrated with the Clinical Medicine course.

Pharmacotherapeutics 2**3 credits**

This course is a continuation course and will concentrate on the clinical principle pharmacotherapeutics of pharmacokinetics, drug metabolism, drug interactions and adverse reactions, applications of drug for various organ systems integrated with the Clinical Medicine course.

Psychology in Healthcare

3 credits

This course provides a foundation of practical knowledge regarding the assessment, diagnosis, management and referral of the major psychological disorders as they may present across the lifespan. Students develop an understanding of basic psychopharmacology and the appropriate use of pharmaceuticals for treating the psychological disorders. We also explore modalities of health promotion and disease prevention as well as methods for enhancing communication between health providers and patients and thus, increasing adherence to treatment. The impact of hospitalization on the patient is also considered.

Women's Health

2 credits

This course will focus on the reproductive system of female patients and impact of disease associated within gynecology and obstetrics. The course will include instruction in the evaluation, management and education of patients in the areas of women's health, breast diseases, human sexuality, domestic violence, birth control, infertility, pregnancy, pre and post-natal care, labor and delivery and menopause.

Pediatrics

2 credits

This course will focus on the patient population that includes birth to age 18. Growth and development from infancy through childhood and adolescence will be presented along with common pediatric problems and emergencies; there will be discussion of routine health maintenance, anticipatory guidance, preventative care and family dynamics

Special Topics in Medicine

1 credit

This course will focus on an overview of current topics in the healthcare delivery system including public health, cultural competency, integrative medicine, service learning, health care literacy, ethical dilemmas relevant to clinical practice and its relationship with the role of the Physician-PA team.

Evidence Based Medicine (1 credit)

Evidence-based medicine (EBM) is the practice of medicine that utilizes available scientific research in the process of making

decisions in patient care. Students will participate in the process of integrating research into medical decision making, clinical expertise, and the needs and preferences of the patient via simulated patient experiences.

Healthcare Policy

2 credits

This course will focus on the introduction of health care management to include health care organization, policy, economics, health care insurance, coding and reimbursement.

Genetics

1 credit

This course is an introduction to medical genetics and genomics and will explore the basis of disease and clinical genetic disorders.

Emergency Medicine and Surgery

4 credits

This course will focus on the management of emergency medical and surgical presentations. Students will learn the basics of triage, stabilization, diagnostic and therapeutic procedures and the appropriate specialty consultations. The fundamentals of surgical practices will be presented to include pre and Post-Operative patient care. Students will also have instruction in basic life support, advanced cardiac life support and pediatric advanced life support.

Procedures in Medicine

1 credit

This course will present theory and hands on experience in procedures in office, emergency and surgical settings. Principles of sterile technique, injections, intravenous catheterizations, phlebotomy, urethral catheterizations, gowning and gloving, knot tying, suturing, casting and splinting are examples of the course content.

CLINICAL YEAR

Internal Medicine

5 credits

This is a 5 week rotation in an ambulatory, in/outpatient hospital or office-based primary care facility under the direction of a preceptor. The student will have exposure and the ability to perform comprehensive history and physical exams, develop differential diagnoses and therapeutic treatment plans for patients with acute and chronic medical problems.

The student will recognize the need for consultation and referral, transfer to an emergency or acute care setting. The student will have experiences in acute and chronic disease management, behavioral health, long term health care, health maintenance and promotion and patient education in the adult life span.

Family Practice

5 credits

This is a 5 week rotation in an ambulatory, outpatient hospital or office-based primary care facility under the direction of a preceptor. The student will have exposure and the ability to perform comprehensive history and physical exams, develop differential diagnoses and therapeutic treatment plans for patients with acute and chronic medical problems. The student will recognize the need for consultation and referral, transfer to an emergency or acute care setting. The student will have experiences in acute and chronic disease management, behavioral health, adult long term health care, health maintenance and promotion and patient education across the life span.

Thesis Guidance

2 credits

This is a 2 week course that will be guided by a faculty advisor to assist the student in developing the master portfolio project that includes active learning and the application of learning to improve the practice of medicine, a current standard implemented by the physician assistant profession. This project will be done in partnership with a preceptor/office practice that the student has completed a rotation with; the project will include comparison of some aspect of practice to national benchmarks, performance guidelines or other established evidence-based metric or standard. Based on the comparison, the student will develop and implement a plan for improvement in that area. To example the project, a practice might be interested in improving how they counsel on smoking cessation in the adult patient population. The student would develop counseling guidelines in line with current evidence based standards and the course of implementation for the practice to carry out. This can then be further evaluated over time by the practice to meet current performance improvement as mandated by the profession.

Women's Health

5 credits

This is a 5 week rotation in an ambulatory, in/outpatient hospital or office-based facility under the direction of a preceptor. The student will have exposure and the ability to perform comprehensive history and physical exams, develop differential diagnoses and therapeutic treatment plans for patients with women's health medical conditions to include prenatal and obstetrical care. The student will have experiences in health maintenance and promotion and patient education in women's health.

Pediatrics

5 credits

This is a 5 week rotation in an ambulatory, outpatient hospital or office-based facility under the direction of a preceptor. Students will have exposure and the ability to perform comprehensive history and physical exams, develop differential diagnoses and therapeutic treatment plans for infants, children and adolescents. The student will recognize normal growth and development and be able to differentiate common abnormalities of growth and development. The student will have experiences in health maintenance and promotion, and patient education in pediatrics.

Emergency Medicine

5 credits

This is a 5 week rotation in an emergency department facility under the direction of a preceptor. Students will have exposure and the ability to perform comprehensive history and physical exams, develop differential diagnoses, therapeutic treatment plans to include common procedures in the emergency room, emphasizes will be placed on the pathophysiology, evaluation and management of systemic diseases and surgical conditions unique to the clinical practice of emergency medicine.

Surgery

5 credits

This is a 5 week rotation in an inpatient / outpatient hospital setting under the direction of a preceptor. Students will have exposure and the ability to perform comprehensive history and physical exams, develop differential diagnoses, therapeutic treatment plans to include participation in common procedures in surgical setting, emphasizes will be placed on the pathophysiology, evaluation and management of pre and post-operative care, systemic diseases and surgical conditions unique to the clinical practice of surgery.

Elective Rotation

5 credits

This is a 5 week rotation in an ambulatory, in/outpatient hospital or office-based facility under the direction of a preceptor in a health care area of choice for the student with preapproval of the clinical director. The rotation will emphasize the pathophysiology, evaluation, diagnosis, and management of diseases and conditions unique to the clinical practice. This rotation will fulfill the student's clinical area of interest and allow preparation for employment opportunities.

Elective rotation

4 credits

This is a 4 week rotation in an ambulatory in/outpatient hospital or office-based facility under the direction of a preceptor in a health care area of choice for the student with preapproval of the clinical director. The rotation will emphasize the pathophysiology, evaluation, diagnosis, and management of diseases and conditions unique to the clinical practice. This rotation will fulfill the student's clinical area of interest and allow preparation for employment opportunities.

Mental Health Rotation

1 credit

This is a one week rotation in an ambulatory, in/outpatient hospital or office-based mental health facility under the direction of a preceptor. The student will have exposure and the ability to perform comprehensive history, mental status and physical exams, develop differential diagnoses and pharmacological and nonpharmacological therapeutic treatment plans for patients with mental health conditions. The student will recognize the need for consultation, referral and ancillary services for mental health conditions.

Summative Evaluation/Experience

2 credits

This course will serve as a capstone experience to prepare the student for the profession. There will be focus on curriculum review of topics in medicine, student presentation of master portfolio projects to include case presentations, service learning and professional growth experiences. Students must successfully complete the final summative evaluation testing in core competencies and clinical simulated scenarios for graduation certification