

# Master of Physician Assistant Studies, M.P.A.

The Master of Physician Assistant Studies (M.P.A.) program emphasizes primary care medicine, particularly family medicine. It also offers elective clinical rotations in selected medical subspecialties. Students who complete the program are eligible to take the National Certifying Examination for Primary Care Physician Assistants, which they must complete successfully in order to register as physician assistants in the United States.

The Department of Physician Assistant Studies and Services is accredited by the Accreditation Review Commission on Education for the Physician Assistant and is a member of the Physician Assistant Education Association.

## Requirements

The Master of Physician Assistant Studies (M.P.A.) requires a minimum of 114 s.h. of credit. The curriculum spans 28 months and consists of a didactic phase and a clinical phase. The program begins in August.

The Master of Physician Assistant Studies requires the following work.

## Didactic Curriculum

The M.P.A. program's didactic phase is built on a triple-helix model whose three strands consist of clinical and professional skills (CAPS), mechanisms of health and disease (MOHD), and medicine and society (MAS). The strands are interwoven, assuring that their material is integrated and revisited throughout the didactic phase, so that students' understanding and mastery of the material deepens progressively.

The didactic curriculum consists of the following courses.

### Human Anatomy and Foundations of Life

ACB:8101 Medical Gross Human Anatomy involves complete dissection of the human body. Students learn to identify the human body's components and learn how their structures and locations relate to their functions. They also learn much of the language they will need in order to communicate accurately and specifically with patients and other physicians.

MED:8123 Foundations of Cellular Life covers genetics, embryology, molecular biology, biochemistry, cell biology, and histology. Students learn the molecular events required for cellular life and how cells grow and interact to form the basic tissues of the human body. This course provides the necessary framework students will need in order to begin the mechanisms of health and disease series.

### Clinical and Professional Skills

The clinical and professional skills (CAPS) strand provides students with the knowledge, skills, and attitudes required for professional development and clinical excellence, including the sense of inquiry and lifelong habits of skill acquisition, self-assessment, and reflective practice. CAPS features developmental learning through increasingly challenging

experiences across the curriculum, repeated practice opportunities, observation and feedback, and self-directed learning and reflection. CAPS requires the following three courses.

MED:8121 Clinical and Professional Skills I introduces students to concepts of clinical reasoning, communication, physical examination, and evidence-based clinical practice as well as the principles of biomedical ethics. The Longitudinal Clinical Mentor (LCM) program allows early clinical interactions and helps place classroom experiences into the context of patient care. Through interactions with students from other health sciences colleges, M.P.A. students begin to explore the interprofessional approach to caring for patients.

MED:8131 Clinical and Professional Skills II reinforces clinical reasoning concepts from MED:8121 and introduces additional elements of clinical reasoning, which are practiced through interactions with standardized patients and through Longitudinal Clinical Mentor clinical visits. The varied experiences help students gain a deeper appreciation for issues in biomedical ethics. As part of interprofessional education, students focus on the strengths and barriers involved in providing comprehensive interdisciplinary patient care.

MED:8221 Clinical and Professional Skills III develops advanced clinical reasoning skills through focused patient encounters and interactions with special patient populations. Emphasis is on students' ability to integrate and use concepts from the other curricular strands that are required for cost-conscious, patient-centered, interdisciplinary care.

## Mechanisms of Health and Disease

The mechanisms of health and disease (MOHD) strand focuses on multisystem mechanisms. MOHD requires the following five courses.

MED:8124 Mechanisms of Health and Disease I covers normal and healthy processes within and among the mechanisms of oxygenation, metabolism, and genetics/development.

MED:8133 Mechanisms of Health and Disease II covers normal and healthy processes within and among the mechanisms of immunology/inflammation, locomotion/integument, and neuropsychiatry.

MED:8134 Mechanisms of Health and Disease III covers abnormalities or disruptions leading to disease within and among the mechanisms of oxygenation, metabolism, and genetics/development.

MED:8223 Mechanisms of Health and Disease IV covers abnormalities or disruptions leading to disease within and among the mechanisms of immunology/inflammation, locomotion/integument, and neuropsychiatry.

MED:8224 Mechanisms of Health and Disease Keystone provides a transition from classroom instruction in MED:8124, MED:8133, MED:8134, and MED:8223 to clinical practice. Foundational information from those courses is approached from the perspective of common clinic encounters. Students make diagnostic and management decisions about common important clinical problems using the foundational knowledge they gained from those courses.

## Medicine and Society

The medicine and society (MAS) strand teaches students about disease prevention, health promotion services, public health, epidemiology, health services organizations and

delivery, and community dimensions of medical practice. MAS requires the following three courses.

MED:8122 Medicine and Society I introduces social determinants of health. Students investigate the influence and impact of culture and the community on health care, learn about community resources, and apply health and risk assessment to individual patients and to themselves.

MED:8132 Medicine and Society II focuses on public health and epidemiology, with attention to screening, global health, and environmental hazards.

MED:8222 Medicine and Society III focuses on health services organization and delivery, with emphasis on community dimensions of medical practice and patient safety.

## Summer Curriculum

Summer curriculum consists of a six-week summer session that includes didactic workshop material in cardiology and radiology. Students complete a two-week introduction to clinical medicine before beginning the clinical rotations. Summer curriculum requires the following five courses.

Code	Title	Hours
PA:8212	Fundamentals of EKG and ACLS for Physician Assistant Students	2
PA:8213	Fundamentals of Radiology for Physician Assistant Students	1
PA:8214	Fundamentals of Clinical Laboratory Medicine for Physician Assistant Students	1
PA:8301	Seminar for Physician Assistant Students	1
PA:8302	Physician Assistant Professional and Clinical Skills	1

## Clinical Curriculum

The program's second phase concentrates on clinical education. Students complete four weeks of didactic workshops and rotations and a 36-week core of required primary care clinical rotations, including general internal medicine, surgery, family medicine, pediatrics, emergency medicine, gynecology, and psychiatry in affiliated hospitals throughout the United States and select international locations. Students then select eight weeks of electives which may include rotations such as geriatrics, cardiology, dermatology, and orthopedics.

The primary care clinical rotations are designed to provide instruction and experience in caring for patients in a way that enables students to integrate the knowledge, skills, behaviors, and attitudes they learned in the program's didactic phase. Clinical training is provided at University of Iowa Hospitals & Clinics, the VA Iowa City Health Care, the VA Central Iowa Health Care System and Broadlawns Medical Center in Des Moines, and other affiliated hospitals throughout Iowa. In elective rotations, students gain additional clinical experience through placement with selected preceptors involved in office-based practices, typically in medically underserved rural areas.

Students also complete a master's degree project as part of the clinical curriculum.

## Required Clinical Rotation

The following clinical rotations are required.

Code	Title	Hours
PA:8304	Emergency Medicine for Physician Assistant Students	4
PA:8305	Gynecology for Physician Assistant Students	4
PA:8306	Family Practice I for Physician Assistant Students	4
PA:8307	Family Practice II for Physician Assistant Students	4
PA:8308	General Surgery for Physician Assistant Students	6
PA:8309	Internal Medicine for Physician Assistant Students	6
PA:8310	Pediatrics for Physician Assistant Students	4
PA:8311	Psychiatry for Physician Assistant Students	4

## Elective Clinical Rotations

Students select elective clinical rotations from one of the general categories listed below. Subspecialties for the clinical rotations are included under each general category. Registration in the subspecialty area may vary based on availability from year to year.

Code	Title	Hours
PA:8325	Pediatric Elective for Physician Assistant Students	arr.
Subspecialty areas in pediatrics may include, but are not limited to allergy, bone marrow transplant, cardiology, gastroenterology, genetics, neonatal intensive care (NICU), neonatology, orthopedics, pulmonary, and psychiatry		
PA:8326	Radiology Elective for Physician Assistant Students	arr.
PA:8329	Psychiatry Elective for Physician Assistant Students	arr.
PA:8330	Surgery Elective for Physician Assistant Students (Subspecialty areas: burn, cardiothoracic, neurology, surgical neonatal intensive care (SNICU), transplant and organ retrieval)	arr.
Subspecialty areas in surgery may include, but are not limited to burn, cardiothoracic, neurology, surgical neonatal intensive care (SNICU), and transplant and organ retrieval		
PA:8335	Internal Medicine Elective for Physician Assistant Students	arr.

Subspecialty areas in internal medicine include, but are not limited to alternative medicine, cardiology, correctional medicine, dermatology, endocrinology, gastroenterology, genetics, gynecological oncology, hospice, infectious disease, interventional radiology, medical intensive care unit (MICU), migrant health, nephrology, neurology, obstetrics, ophthalmology, oncology, orthopedics, otolaryngology/ear, nose, throat, palliative care, pulmonary, rheumatology, and urology

PA:8337	Internal Medicine (EKG) Elective for Physician Assistant Students	arr.
PA:8346	Family Practice Elective for Physician Assistant Students	arr.
PA:8347	Gynecology Elective (Women's Health) for Physician Assistant Students	arr.
PA:8353	International Medicine for Physician Assistant Students	arr.
PA:8364	Emergency Medicine Elective for Physician Assistant Students	2,4,6,8,10

Subspecialty areas in emergency medicine may include, but are not limited to occupational health, toxicology, urgent care, and wilderness medicine

## Admission

Applicants must:

- be citizens or permanent residents of the United States;
- hold a baccalaureate degree from an accredited institution in the United States (the degree does not have to be completed at the time of admission, but must be conferred prior to the start of the program)<sup>1</sup>;
- have a minimum cumulative g.p.a. of 3.00 on a 4.00 scale;
- have a minimum overall science g.p.a. of 3.20 on a 4.00 scale or a science g.p.a. of at least 3.20 on a 4.00 scale on the most recent 40 s.h. of college-level, science-based coursework (science courses are subject to department approval);
- have completed the prerequisite courses no more than 10 years before they apply and all courses must be taken for letter grades (see "Prerequisite Science Courses" below);
- have taken the Graduate Record Examination (GRE) General Test no more than 10 years before they apply (must score at the 25th percentile or higher in each of the individual sections—quantitative, verbal, and analytical) or the Medical College Admission Test (MCAT) no more than 10 years before they apply (no minimum MCAT score is required at this time);
- have completed a minimum of 1,000 hours of direct patient health care experience by December 31 of the application year (hours subject to departmental approval and applicants can be awarded between 0-100 percent of hours completed);
- submit three letters of recommendation (one must be from a collegiate academic reference and one must be from a health care supervisor (shadowing experience does not count, but may be used for the third recommendation letter));

- meet the admission requirements of the Graduate College (see the Manual of Rules and Regulations on the Graduate College website);
- have taken the Test of English as a Foreign Language (TOEFL) if English is not their native language (only the internet-based test is accepted and applicants must have a total score of at least 93 with a speaking score of at least 26) or have an acceptable score on the International English Language Testing System (IELTS) or the Duolingo English Test (DET)<sup>2</sup>; and
- be able to meet the program's technical standards (see "Technical Standards" below).

<sup>1</sup> International applicants will have their credentials reviewed for degree completion and equivalency.

<sup>2</sup> International applicants who do not speak English as their native language should have TOEFL scores sent from the Educational Testing Service (ETS) to the Department of Physician Assistant Studies and Services or have their acceptable IELTS or DET scores mailed to the University of Iowa. This requirement may be waived for applicants with a master's or doctoral degree from an accredited U.S. institution.

## Prerequisite Science Courses

Applicants must have completed preparatory science courses in biological, chemical, and statistical sciences. Prerequisite courses can be in progress at the time of admission unless stated below. Science-based courses are subject to the approval by the Department of Physician Assistant Studies and Services.

### Biological Science

These courses are required.

- An introductory biology or zoology course sequence (minimum of a two semester sequence unless otherwise approved).
- An animal, exercise, or human physiology course.
- A minimum of three additional upper-level biological science courses. To qualify as upper level, the biological science courses must require a prerequisite course to enroll. Courses that have been used to satisfy this requirement include cell biology, cell physiology, endocrinology, genetics, histology, immunology, microbiology, molecular biology, neurobiology, pharmacology, and other related disciplines.

### Chemical Science

These courses are required.

- An introductory chemistry course sequence (a minimum of a two-semester sequence, unless otherwise approved).
- At least one semester of organic chemistry (must be at a higher level than a survey of organic chemistry course).
- At least one semester of biochemistry (must be at a higher level than a survey of biochemistry course and be completed at the time of application).

### Statistical Science

This course is required.

- Any course with a statistical focus, such as a general, introductory, psychological, or business statistics course; or biostatistics; or a qualitative research methods course.

Satisfaction of the basic admission requirements does not ensure acceptance to the program. The admission committee selects the applicants it considers best qualified. The admission committee requests interviews with the most qualified applicants.

## Technical Standards

Individuals admitted to the Department of Physician Assistant Studies and Services must possess the capability to complete the entire curriculum and earn the Master of Physician Assistant Studies degree. The curriculum requires demonstrated proficiency in a variety of cognitive, problem-solving, manipulative, communicative, and interpersonal skills. For more information, view the University of Iowa Carver College of Medicine Technical Standards for Admission and Retention on the Department of Physician Assistant Studies and Services website.

## Application Timeline and Process

Applications are accepted from the end of April to October 1 for entry into the program the following August. Applicants must apply through the Central Application Service for Physician Assistants (CASPA).

The admission committee prefers that the majority of prerequisite course requirements be completed by the October 1 application deadline date.

All materials must be received and verified by CASPA, and all additional information requested by the Physician Assistant Studies and Services Program submitted by the October 1 deadline.

All final decisions related to admission deadlines, process, and decisions regarding admission are up to the department administrator, in collaboration with the admission committee.

## Career Advancement

Physician assistants work in a variety of settings, including medical offices, hospital emergency rooms, nursing homes, rural satellite clinics, health maintenance organizations, and patients' homes.