

# MD PROGRAM

## Admission Requirements

Penn State University College of Medicine is committed to developing tomorrow's diverse group of humanistic, systems-thinking physicians who will serve people in times of health and in times of illness. We seek strong applicants who come to medicine with a passion to serve and a commitment to excellence and life-long learning. In today's rapidly changing healthcare environment, physicians must acquire a depth of understanding in the life sciences, humanities, clinical sciences and health system sciences. We seek students who bring a full, rigorous and holistic background of study and experiences to medical school and who are poised for the depth and breadth of learning demanded for tomorrow's physician scholars and leaders.

We accept students in good standing who will be graduates of accredited colleges and universities in the U.S. or Canada before matriculation to Penn State College of Medicine. There are no restrictions on the type of major a student chooses. The Medical College Admission Test (MCAT) is required and used along with other data to predict success in our educational program

## Prerequisite Preparation For Admission

Penn State College of Medicine recognizes that its applicants bring varied and rich undergraduate academic and personal experiences to their admissions credentials. In order to acknowledge the diversity and flexibility of preparation of our applicants, we have chosen to describe the competencies we expect of our students at the time of entry into medical School. Instead of listing prerequisite course requirements, we describe required competencies that will most often be met through traditional and/or newly established interdisciplinary courses of study in an accredited institution of higher learning. We define competency as the acquired knowledge to solve problems in the discipline. Applicants will indicate whether the acquired competency was obtained by course work or other activity such as research or work. Competitive applicants should demonstrate competency in each of the following five areas adapted from the MCAT description (<https://students-residents.aamc.org/applying-medical-school/article/whats-mcat-exam/>):

- **Biological and Biochemical Foundations of Living Systems:** The contribution of biomolecules to the structure and function of cells; the interaction of molecules, cells, and organs in carrying out the functions of living organisms; the interplay of complex systems, tissues and organs in sensing internal and external environments and maintaining internal environment stability in the setting of changing external environments.
- **Chemical and Physical Foundations of Biological Systems:** Application of physical principles to explain how complex living organisms transport materials, sense their environment, process signals and respond to changes; use of principles that govern chemical interactions and reactions to form the basis for the molecular dynamics of living systems.
- **Psychological, Social and Biological Foundations of Behavior:** Biological, psychological and sociocultural factors that influence how individuals perceive, think about and react to the world; how they influence behavior and behavior change, how we think about ourselves and interact with others, and how they influence well-being and access to resources that influence well-being.
- **Critical Analysis and Reasoning Skills:** Comprehension of texts, extrapolating ideas to new contexts; assessing the impact of

introducing new factors, information or conditions to ideas from the text.

- **Scientific Inquiry and Thinking & Reasoning:** Knowledge of scientific principles, scientific reasoning and problem-solving, reasoning about the design and execution of research, data-based statistical reasoning, and general mathematical concepts and techniques.

Mastery of competencies is reflected by a strong performance in the classroom and on the MCAT, knowledge gained from formative experiences, and letters of reference. Applicants should have engaged in-depth study based on the AAMC-HHMI Scientific Foundations for Future Physicians (<https://store.aamc.org/scientific-foundations-for-future-physicians-pdf.html>) and AAMC-Behavioral and Social Science Foundations for Future Physicians (<https://store.aamc.org/behavioral-and-social-science-foundations-for-future-physicians-pdf.html>).

In addition to the above Science and Thinking & Reasoning competencies, Penn State College of Medicine expects applicants to demonstrate achievement of Interpersonal and Intrapersonal competencies. The following competencies are derived from the interpersonal and intrapersonal descriptions within the AAMC Core Competencies for Entering Medical Students (<https://students-residents.staging.aamc.org/applying-medical-school/article/core-competencies/>).

- **Interpersonal:** desire to help others; aware that social and behavioral cues affect interactions and behaviors; interacts effectively with people from diverse backgrounds; works collaboratively in teams; listens effectively and conveys information clearly.
- **Intrapersonal:** behaves in an honest and ethical manner; fulfills obligations in a timely and satisfactory manner; tolerates and adapts to stressful or changing environments; sets for continuous improvement; reflects on actions and solicits feedback.

## Coursework and Experience

Though the most common methods of becoming competent in the Science, Thinking & Reasoning, Interpersonal and Intrapersonal competencies will be formal coursework and personal experiences, we acknowledge that students may accomplish the learning in other ways. Alternative methods of preparation, in combination with coursework, might include research or employment experiences.

## Advanced Placement Coursework

Penn State College of Medicine recognizes advanced placement courses for competencies only if they appear as earned credit on the applicant's college transcript. However, many of the most competitive applicants have fulfilled advanced course work in those same areas during their baccalaureate years.