

# PRE-MEDICINE

The U.S. Bureau of Labor Statistics projects shortages across health care professions, including physicians. Some specialties, including primary care, will face severe shortages in the next five to twenty years. To practice medicine, further education and training are required, ranging from 4 to 8 years of additional schooling and training after college.

If you are considering medical school after college, UWM will provide you with an excellent foundation to help you reach your goal. Admission to medical school is a highly competitive process, and students must demonstrate very strong academic performance as well as provide evidence that they have engaged in health-related work experiences to meet the rigorous admission standards of medical school. UWM graduates have consistently been admitted to medical schools at a rate equal to or greater than the national average; many UWM Pre-Medical students have gone on to attend top-ranked medical schools and fulfilling careers in different medical specialties.

Medical schools do not require any specific major. What they do expect, however, is that students will have taken the necessary preparatory science classes to prepare for the demands of medical school. Because of the number of biology and chemistry classes that need to be taken, most students choose to major in biology, chemistry, biochemistry, or neuroscience, but this is not a requirement. As long as a student takes the required coursework, they can major in any subject area.

Many individuals feel a calling to the medical profession after they have graduated and been working in another profession. Individuals in this situation who did not major in a science field while in college or who have low grades in previous science education will maximize their opportunity to become an admissible medical school candidate by re-taking science courses or by returning to school for a full major in a related science.

A significant number of volunteer or work hours is also often a requirement for application to medical school so it is important to work with the Pre-Medical advisor beginning in freshman year or upon entry to the certificate program in order to plan all needed activities into your college career.

## Requirements

The application process for medical school is highly competitive. Students are advised to work closely with the pre-med advisor to ensure they are able to present the strongest possible application packet for medical school with exceptional grades, standardized test scores, and experiential learning.

Nearly all medical schools require that applicants take the Medical College Admission Test (MCAT). Pre-Medical students normally should arrange to take this test at the end of their junior year. The Pre-Medical advisor can provide information regarding the administration of this test.

Most medical schools consider the following as minimal preparation for admission:

- One year of English;
- mathematics at least through pre-calculus;
- Two to two-and-a-half years of chemistry, including inorganic chemistry, organic chemistry, and biochemistry;
- One year of biology (more is advised); and
- One year of physics.

For most medical schools, science courses must include laboratory work.

Effective 2015, the MCAT added a social/behavioral science component and additional chemistry. To be well prepared for the MCAT, students are advised to complete PSYCH 101, SOCIOL 101, and PH 101 (as well as other courses selected in consultation with the premed advisor) and CHEM 501. Other classes, such as Communication, are more frequently being strongly recommended or required by various medical schools.

Some medical schools specify additional courses as part of the minimal preparation for admission. Calculus frequently is required or recommended. Therefore, Pre-Medical students should ascertain the specific requirements of the schools to which they intend to apply and plan their undergraduate programs accordingly. A list of all medical college admission requirements is located in the College advising office.

## Science Courses that Satisfy Medical School Admission Requirements

Code	Title	Credits
BIO SCI 150	Foundations of Biological Sciences I	4
BIO SCI 152	Foundations of Biological Sciences II	4
One advanced course in Biological Sciences with lab		4-5
CHEM 102	General Chemistry	5
CHEM 104	General Chemistry and Qualitative Analysis	5
CHEM 343	Organic Chemistry	3
CHEM 344	Organic Chemistry Laboratory	2
CHEM 345	Organic Chemistry	3
CHEM 501	Introduction to Biochemistry (required at UW-Madison Medical School)	3
Math (required at the Medical College of Wisconsin)		4
Select one of the following options:		10
Option 1:		
PHYSICS 120 & PHYSICS 121	General Physics I (Non-Calculus Treatment) and General Physics Laboratory I (Non-Calculus Treatment)	
PHYSICS 122 & PHYSICS 123	General Physics II (Non-Calculus Treatment) and General Physics Laboratory II (Non-Calculus Treatment)	
Option 2:		
PHYSICS 209 & PHYSICS 214	Physics I (Calculus Treatment) and Lab Physics I (Calculus Treatment)	
PHYSICS 210 & PHYSICS 215	Physics II (Calculus Treatment) and Lab Physics II (Calculus Treatment)	
Option 3:		
PHYSICS 219	Physics I: Calculus-Based, Studio Format	
PHYSICS 220	Physics II: Calculus-Based, Studio Format	
Statistics: Any statistics course (required at UW-Madison Medical School)		3
<b>Total Credits</b>		<b>50-51</b>

Although the courses listed above are mandatory for admission to almost all American medical schools, the rest of the program can be whatever the student wishes. Students are not required to major in

biology, chemistry, or biochemistry in order to gain admission to medical school, though many choose to do so.