



# Pre-Medical Studies at UW-Whitewater

Last updated in June 2021

**Do you aspire to become a physician?** The first thing to understand is that the medical school admissions process is extremely selective. U.S. medical schools will only admit students who demonstrate outstanding academic achievement, a clear and ongoing commitment to helping and caring for others, and evidence of the integrity, compassion, and maturity that is expected of healthcare professionals. Yes, the demands and expectations are very high, but they are not impossible to meet! The main characteristic that distinguishes persons accepted to medical school from those who don't is *commitment to the effort*. To be successful a pre-med student must whole-heartedly commit to truly learning what is necessary and to building a track record of extracurricular accomplishments that meet or exceed medical school expectations. **Getting into medical school is a full-time job!** This guide summarizes the goals and requirements that must be met by students seeking admission to medical school and answers a number of frequently asked questions.

**First thing to consider, can I major in pre-med. at UW-W?** We don't offer "pre-med" as a major because we want all students to receive their bachelor's degree in a defined subject area (part of the medical school application process wants a completed BS/BA degree); ideally an area they're passionate about and in which they'll be employable or eligible for further training if not accepted into medical school (i.e. "Plan B"). In reality, there is no such major as Pre-Med, instead, it is set of courses that prepare students for the application process. Traditionally most UW-W pre-meds major in Biology or Chemistry, but students are free to major in ANY academic subject area they choose. U.S. medical schools will accept college grads that have successfully completed the required science courses, done well on the MCAT, and met the various other criteria for admittance regardless of their undergraduate major/minor.

To be clear, the Biology Department and related Departments such as Chemistry can provide all of the needed course work to cover a Pre-Med curriculum.

## Advising

As a student in Biology you will have an emphasis and an advisor. All advisors in Biology have extensive experience in academics (they all have PhD's) and are well qualified to help you achieve your BS/BA degree. They will guide you thru all of the course work needed and will be aware you are pursuing a pre-med pathway. All advisors have an understanding of the courses you need, but may not know all of the details of the various schools and the complex pre-med application process. For this reason, we have a group of professors' that specializes in helping Pre-Meds. They will set up meetings for like-minded students, be available for personnel conversations, etc. Pay attention to emails and other messages that will inform students of these opportunities.

## Have a Plan B & C

It is not unusual to change your mind as you experience new interests and topics. We encourage students to have a realistic outlook as to their likelihood of success. Given the many opportunities a BS/BA degree will offer, a variety of pathways are possible. At various points we want to have a reality check-in with our students.

## Prerequisite Coursework for Medical Schools in Wisconsin:

**General Biology, 2 semesters:** BIO 141 & BIO 142 are recommended, but BIO 120 is acceptable for students **not** majoring or minoring in Biology.

**General Chemistry, 2 semesters both with lab:** CHEM 102 & CHEM 104

**Organic Chemistry, 1 semester:** CHEM 251 (an O-Chem. lab is not required)

**Biological Chemistry (Biochem), 1 semester:** CHEM 454 OR BIO 456

**Advanced Biology, 1 semester:** BIO 251 or higher. For BIO majors MCW recommends *Microbiology & Human Anatomy & Physiology I & II*. UWSMPH has no set prerequisites or recommendations.

**NOTE:** BIO 120 is a prerequisite for both BIO 361 & BIO 362 for students not majoring or minoring in Biology.

**General Physics with lab, 2 semesters:** PHYSCS 140 & 141 (OR PHYSCS 180 & 181)

**Advanced Mathematics, 1 semester:** MCW strongly recommends a *Statistics* course. UWSMPH requires *Statistics* and will **consider** allowing other “statistics intensive” courses (e.g. CHEM 352) to count upon request for high-achieving students.

**“Writing Intensive course”, 1 semester:** courses in Psychology, Sociology (or Humanities for UWSMPH) that require  $\geq$  “large” research paper with bibliography. **Hint:** Before enrolling in a course of interest to fulfill this prerequisite be sure to contact the professor to **confirm** that such an assignment will be included in the course OR to ask if they’re willing to include one for you.

**Speech, 1 semester:** required for MCW (Not required for UWSMPH).

**Grade Point Average (Are you above average at studying and learning?)**

To have a realistic chance of being accepted to medical school students **MUST** have a GPA above 3.5. The average GPA for students **accepted** to US medical schools in 2019-20 was **3.73**: Most had higher GPAs.

**MCAT Scores (Tests how well you’ve learned and how well you can think.)**

Medical schools expect students to score very well on the MCAT. For 2019-20 the average scores achieved by students **accepted** to US medical schools was a composite score of a **511.5** (on the 472 – 528 scale).

**Extracurricular Activities (Are you committed to caring for others? Do you know what it’s like to work in the healthcare field?)** Medical schools desire students who, in addition to being good students, are committed to non-academic and service endeavors such as athletics, volunteerism, and community service. Experience working in the healthcare field (e.g. working, volunteering, or interning in a clinic, shadowing practicing physicians, physician assistants (PAs), RNs, and nurse practitioners (NPs), etc.) is important because it demonstrates real commitment to a career caring for others and passion to work with people in a clinical setting.

**Timeline For Preparation:** The following website provides detailed info: <https://students-residents.aamc.org/applying-medical-school/article/timeline-application-and-admission-medical-school/>

**Freshman year:** Introduce yourself to the Biology Department, talk with the Chair and ask about the Pre-Med advisor group. Get involved in appropriate clubs. Work hard to stay focused and establish good study habits. Seek help from instructors *immediately* if you have difficulty in courses. Talk to your instructors and learn to participate/ask questions in your classes. Note the introductory courses in Biology, Chemistry and Physics are 5 credit courses, and it will be important to do well in them to set the tone for your GPA.

**Sophomore year:** Investigate internships & undergrad. research (at UW-W & elsewhere) and get involved. Become knowledgeable about the MCAT and the med school application process. Begin actively preparing for the MCAT in the summer.

**Junior year:** Continue undergraduate research & internship/shadowing and MCAT prep. Take the MCAT early (but not until fully prepared) and apply to AMCAS in spring or early summer. Apply for graduation at the end of the spring term. Re-take the MCAT in late summer/fall if necessary.

**Senior year:** Complete applications, interview at med. schools, complete research projects, Graduate.

### **Frequently Asked Questions:**

**When do I need to take the MCAT?** Med schools recommend taking the test in the winter or spring of the year before you hope to be admitted. The test is now computer based and is offered on approximately 30 different dates from January through September each year. This makes re-testing (in the event of low scores) possible in the summer or fall of the same year. *Every* college class is preparation for the MCAT and for a career in medicine. Because physicians must be thoroughly educated, well rounded, and broadly knowledgeable there are no “blow-off” classes for pre-meds. Practice MCATs and intensive study/preparation courses are available for purchase by several companies. Students who sincerely focus on *learning* (as opposed to cramming and memorizing) in their college courses are properly preparing for the MCAT and, more importantly, for a future career as a physician. Review of subject matter in preparation for the test, whether through a formal prep course or independently, should begin at least 6-8 months before the test is taken. Coursework in subjects that often cause difficulty on the MCAT (e.g. Organic Chemistry and Physics) should be completed before taking the test.

**What percentage of UW-W pre-meds get into medical school?** Without formal selection criteria students of widely varying ability identify themselves as “pre-meds” making this impossible to answer with a simple number. It is clear however that UW-W students who get into medical school (at least 1-2 each year) have met or surpassed the requirements and are just as competitive in the admissions process as students at any university. Whether a student attends Harvard, UW-Madison, or UW-W, success depends almost entirely on their behavior and performance. Serious students at UW-W *routinely* get into top medical and graduate (Ph.D.) schools.

**How/where can I get the necessary extracurricular experience?** Significant experience working or volunteering in a clinical setting is required for med school admissions. Internship opportunities are available at the Ambrose Health Center on campus and at local hospitals. Local physicians have also been amenable to providing shadowing opportunities to UW-W students. Pre-meds are also strongly encouraged to join and be active in organizations like the Pre-Health Professions club, *Beta-Beta-Beta* (The National Biology Honor Society), and Chemistry Club. Opportunities for student involvement in serious scientific research abound at UW-W and serve as a stepping-stone to admittance into competitive summer undergraduate research programs at major universities worldwide.

**What if I already have a college degree?** Post-baccalaureate (“after the bachelor’s degree”) pre-meds are becoming more numerous nationwide. Whether building on an existing science degree or changing career tracks completely, UW-W offers the coursework and other opportunities necessary to prepare post-bac. pre-meds for the admissions process

**What about other careers in healthcare?** An excellent list of healthcare career options is available at: <https://explorehealthcareers.org> . Course work and specific advisors at UW-W are available to assist students preparing for many of the careers on the list.

**Where do I go for advising?** All pre-meds should meet with their academic advisor during academic advising each semester. Keep in touch with the Pre-medical advising group and pay attention to any notices of meetings or alerts.

A possible timeline

<u>Year</u>	<u>Classes you Should take</u>	<u>Actions</u>
Freshman & Sophomore Yr.	Core classes in Biology & Chemistry finish Math and Physics	Focus on doing well academically Try and get some experience in community work, volunteer in health- related fields
Spring of Sophomore Yr.	Take a mock MCAT (sometimes free by Kaplan or Princeton Review OR find them in MCAT Test Prep books.	
Junior Yr.	Finish up all your core courses, focus on finishing organic chemistry, take Anatomy & Physiology or Comparative Anatomy & Animal Physiology, Biochemistry	Take an MCAT Prep course  By January you should be thinking of applying for the April MCAT  April, take the MCAT exam and start the application process: {AMCAS or AACOMAS}  By June, send in your application(s) apply for the August MCAT just in case! Retake the MCAT if needed in August
Senior Yr.	Take electives in Bio, and other courses that can help you (Ethics, Writing, etc.)  Have a plan to retake the MCAT and reapply.	Finish up application process

