

Contact Info:

Current Students: Contact Laura Stark at 414-229-4654, or email starkl@uwm.edu

Not a UWM Student yet? Call our Admissions Counselor at 414-229-7711 or email let-sci@uwm.edu



Explore Pre-Pharmacy at UWM

UWM offers all of the prerequisite coursework necessary for students to apply to pharmacy schools throughout the country.

Although it theoretically is possible to complete the pre-pharmacy requirements in two years and proceed directly to pharmacy school, the current national average for completion of the pre-pharmacy coursework is three years. In addition, given the highly-competitive nature of gaining admission to pharmacy school, students may present a stronger application if they complete four years of college and earn a bachelor's degree. The average number of credits completed by students admitted to UW-Madison's pharmacy school is 80 to 90 credits (approximately three years of college). At the University of Minnesota pharmacy school, 90% of the students admitted had completed either a BA or BS degree. It is important for students to consider whether or not it is in their best interest to consider completing a Bachelor's degree prior to starting pharmacy school.

Entrance to pharmacy school is very competitive, and there are far more applicants than there are open seats. Different schools have different prerequisites so it is very important that students consult with the pre-professional health advisor every semester beginning freshman year.

Majors for Pre-Pharmacy Students

It is important to note that "pre-pharmacy" is not a major. While many pre-pharmacy students choose a natural science major such as biochemistry or biology because they already are taking many classes in these areas, pharmacy schools do not require any particular major. Instead, they are interested in well-rounded students who

have the necessary scientific preparation plus other attributes, such as strong oral and written communication, community service and volunteerism, leadership, and cultural competence. Students should consider all possible majors, including those in the arts, humanities (English, philosophy, languages, etc.), or the social sciences (psychology, economics, etc.).

UWM Advantages

Students in the pre-pharmacy program at UWM have several unique opportunities to enhance their preparation for pharmacy school:

» **Intro to the Practice of Pharmacy:** This course offers students a close look at the work of a pharmacist. Lectures with registered pharmacists and faculty cover the history of the field, specialization options, academic requirements, and future trends. Students also participate in rotations through a variety of pharmacy settings in the field.

» **Dual Acceptance Program with the Chicago College of Pharmacy:** Highly-qualified high school seniors can be admitted to both UWM and the Chicago College of Pharmacy at the same time. Those accepted into the program will spend two years at UWM completing the prerequisite courses and then proceed directly to the Chicago College of Pharmacy without needing to take the PCAT exam. Students who are eligible to apply will have an ACT of 25 or higher, an SAT of 1700 or higher, a GPA of 3.20 or higher, community service, and a demonstrated interest in the field of pharmacy as evidenced by work or volunteer experience. The application deadline is February 15th of each year.

» **3+4 Accelerated Program with Concordia University's School of Pharmacy.** Students who meet the programs requirements spend three years at UWM earning credits in the pharmacy pre-requisites and other general education courses. The remaining four years are at Concordia in the pharmacy program. Some Concordia credits will transfer back to UWM, leading to the conference of a Bachelor's Degree in biological

sciences along with the Pharm.D. degree. More information is available from the pre-pharmacy advisor.

» **Office of Undergraduate Research (OUR):**

The OUR program provides access to research experiences for undergraduates. Students work directly with faculty members and graduate students in their chosen field of study.

» **Center for Community-Based Learning, Leadership and Research (CCBLR) :**

CCBLR helps match interested students with opportunities on campus or in the community. It also offers leadership development courses and training to provide students with the philosophical background and tangible skills to make a difference as active citizens during college and after graduation.

Quick Fact: Pharmacy school applicants take the Pharmacy College Admission Test (PCAT) during the junior year of college. This computerized exam covers general academic ability and the specific scientific knowledge necessary to begin pharmacy school.

Advising

Students who identify themselves as pre-pharmacy will be assigned to a dedicated pre-professional advisor. Our pre-professional advisors specialize in helping students prepare for the application process to professional school.

Students will be counseled on the required science courses needed for application to pharmacy school, and those courses will be integrated into the student's schedule regardless of major. Because many science courses have prerequisites and follow a very structured order, it is important that students plan their course schedule carefully. Getting off track as early as the freshman year can delay graduation.

After Undergraduate Studies

The Doctor of Pharmacy degree (Pharm.D.) is the professional degree needed to enter the pharmaceutical field. Most Pharm.D. programs take four years to complete after the undergraduate degree. The first three years consist of classroom work, while the final year consists of hands-on work in the field. There are also some accelerated 3-year Pharm.D. programs as well. Those planning to go into drug research or hospital pharmacy often continue for another one or two years to complete a residency experience.

Students must take two licensing exams in order to become working pharmacists, one on pharmaceutical knowledge and one on state

law related to drugs. State examination and licensing requirements vary from state to state. Pharmacists must complete continuing education requirements throughout their careers to maintain their license.

Career Outlook

Pharmacists dispense drugs prescribed by physicians and other health professionals and provide information to consumers about medications and their uses. They also advise doctors and health care workers on the selection, dosages, interactions, and side effects of drugs. Pharmacists must understand the use, composition, and effects of all types of drugs.

Outside of retail pharmacy, other career opportunities include working in hospitals, drug labs, drug manufacturers, and research corporations.

Scientific advances, an aging population, and expansion of insurance coverage for more Americans all will contribute to growth in the pharmacy industry. In recent years, many new pharmacy schools have opened, putting more pharmacists on the job market. Employment of new pharmacists has consequently slowed and job growth is expected to stay flat through 2024. The median wage of pharmacists was \$121,500 in May 2015 according to the U.S. Bureau of Labor Statistics.

Revised 09/2018

Suggested Pre-Pharmacy Courses

One year of Biology with lab (Bio Sci 150, 152)
Three semesters of General Chemistry with lab (Chem 100, 102, 104)
One year of Organic Chemistry with lab (Chem 343, 344, 345)
One semester of Calculus (Math 231)
One semester of physics with lab (Physics 120/121)
English 102 or higher level
Anatomy and Physiology (Bio Sci 202 and 203)
Microbiology (Bio Sci 101 or 383 – many pharm schools will only take 383)
Biochemistry (Chem 103 or 501 – many pharm schools will only take 501)
Public Speaking or other communication coursework
Cultural diversity course(s)
An Economics and/or Ethics course
Statistics
Intro Psychology (Psych 101)
Additional social sciences, including Economics, Sociology, History, and Anthropology.
Minimum 6 credits of Humanities

