

PHARMACY

Basic Pre-Pharmacy Curriculum

The following courses are required by most pharmacy schools in the United States as the minimum background needed for acceptance into pharmacy school. Pre-Pharmacy courses vary by school. Students need to research which additional courses may be required by contacting the schools they are considering and visiting their websites. The Pharmcas www.pharmcas.org website has links to pharmacy schools and the prerequisites.

Pharmacy School Requirement

Biology	2 semesters
General Chemistry	2 semesters
Organic Chemistry	2 semesters
Biochemistry Lecture	1 semester
Anatomy and Physiology	2 semesters
Microbiology	1 semester
College Physics	2 semesters
English	2 semesters
Math	6-8 credits
Humanities/Social Sci	12 credits
Public Speaking	1 semester
Other science coursework	

GMU Recommended Courses

Biology	213, 303
General Chemistry	211, 212
Organic Chemistry	313/315, 314/318
Biology/Chemistry	483/463
Biology	124, 125 or 425
Biology	305/306
College Physics	243/244, 245/246
English	101, 201 or 302
Math	Math 113 and STAT 250
Humanities/Social Sci	depends on the school
Communication	100 preferred
	Check with schools for additional requirements

Description

Pharmacists are the primary health care practitioner's that patients and other health professionals rely on to assure the safe and appropriate use of medications, as well as monitoring the beneficial outcomes from medications. Pharmacists interpret prescriptions, supervise pharmacy technicians in preparing and dispensing medications, and counsel patients about the use of medications. Also, they assist patients in choosing nonprescription medicines and health products and make referrals to physicians, dentists, and other health practitioners. Pharmacists provide expertise about the composition of drugs, including their chemical, biological, and physical properties and their manufacture. Pharmacists ensure drug purity and strength. They are the drug experts ultimately concerned about the patients' health and wellness.

Personal Qualifications

Above average intelligence, creativity, diligence, and patience are desired. Pharmacists need the ability to work with other people as well as coordinate complex tasks. They must be sensitive to the care and needs of the patients they serve.

Education

Pharmacists require a license to practice after graduating from an accredited pharmacy program and passing a state board exam. It typically takes four years to complete a Doctor of Pharmacy (Pharm.D.) degree once being admitted into a pharmacy program. Most states require the pharmacist to serve a one-year internship before being admitted to full practice. Many colleges will accept a student who has completed a pre-pharmacy program of at least 68 semester hours of specific courses in the sciences and the humanities. However, many colleges prefer students who have completed a four-year degree.

PCAT

Most schools require students to take The Pharmacy College Admission Test (PCAT) which is a standardized test with multiple choice questions and an essay measuring general academic ability and scientific knowledge. The test is offered three times a year. The application deadline to take the test is usually six weeks before the examination date. For more information about the PCAT, visit their web site at <http://PCATweb.info>.

The Pharmacy College Application Service (PharmCAS)

PharmCAS is a centralized service which allows applicants to use a single application process to apply to multiple pharmacy programs. Not all schools participate in PharmCAS. It is the responsibility of the applicant to determine which schools participate and send individual applications to those that do not participate. A complete set of official transcripts for each U.S., U.S. territorial or Canadian college, university, junior college, or graduate school attended should be forwarded directly to PharmCAS by the registrar of the institution(s) attended. For more information about PharmCAS, visit their web site at: www.pharmcas.org.

Employment Outlook

According to the Bureau of Labor and Statistics, the demand for pharmacists has grown considerably because of the growth of the health care industry. Employment is expected to increase faster than the average through 2016. A strong demand for pharmacists exists in community pharmacies throughout the nation. Starting salaries range from \$67,000 to \$119,480 depending on the type of practice and geographic location. The median salary in 2006 for pharmacists based on a national survey by *Drug Topics* was \$92,291.

Further Information

American Association of Colleges of Pharmacy (www.aacp.org)

703-739-2330

American Pharmaceuticals Association (www.aphanet.org)

202-628-4410

Schools of Pharmacy in the Area

Virginia Commonwealth University—<http://www.pharmacy.vcu.edu/>

Shenandoah University-- <http://pharmacy.su.edu/PharmWeb/Hier/index.cfm>

Howard University--<http://www.cpnahs.howard.edu/Pharmacy/index.htm>

University of Maryland--<http://www.pharmacy.umaryland.edu/>

Appalachian College of Pharmacy—www.acpharm.org

Hampton University— <http://www.hamptonu.edu/academics/schools/pharmacy/>

West Virginia University---<http://www.hsc.wvu.edu/sop/>

Pre-Pharmacy Advising

The information in this information sheet should be discussed with a pre-health professional advisor. Pre-pharmacy advising is available by appointment at the Academic Advising Center located in SUB I, Room 304, 703-993-2470. Students must still be advised in their department regarding their major. Students should also read the pre-health website at <http://prehealth.gmu.edu> for more information.

Revised July 2009-DB The primary source of information for this fact sheet was pharmcas.org.