



William & Mary Arts & Sciences

Advice for Students Interested in Pharmacy

Updated March 17, 2023 by Dr. Beverly Sher

At William & Mary, students interested in becoming pharmacists can schedule individual advising appointments with Dr. Beverly Sher, William & Mary's pre-pharmacy advisor, by emailing her at btsher@wm.edu.

To receive announcements of interest to pre-pharmacy students, as well as information about other health professions, subscribe to the Health Careers Advising listserv. To do this, log into lists.wm.edu, click on the Academic line in the list of types of lists, scroll down to Health Careers Advising, click its name, and then click the Subscribe link on the left side of the page.

To learn more about how to prepare yourself for a career in pharmacy, visit the websites of the pharmacy schools that interest you. Here's a great introduction to the career track: <https://pharmacyforme.org/>. The AACP's Future Students website is a must-read, too: see <https://www.aacp.org/resources/students/future>.

To be ready to apply to pharmacy school, you will need to accomplish three tasks: you must complete the courses required by the pharmacy schools, you must take the PCAT, and you must accumulate a significant amount of experience in pharmacy settings.

Coursework

The prerequisite courses required by the pharmacy schools vary from school to school, so be sure to visit the websites of Pharm.D. programs that interest you to make sure that you are taking all of the courses that they require. A guide to the admissions requirements of the different pharmacy schools is available at <https://www.pharmcas.org/school-directory/explore-and-compare>.

Pharm.D. program prerequisites often include two semesters of introductory biology with lab, two semesters of general chemistry with lab, two semesters of organic chemistry with lab, a biochemistry course, and one or two semesters of physics with lab. Additional biology courses may also be recommended or required. Other course requirements may include two semesters of English and one or more semesters of college mathematics, including calculus and statistics.

The prerequisite courses required by the VCU School of Pharmacy, available at <https://pharmacy.vcu.edu/admissions/pharmd/>, along with their William and Mary equivalents, are given in the table below. **Lecture/ lab combinations are given as lecture/ lab.** Note that the VCU School of Pharmacy will not accept AP or IB credit for science prerequisites other than physics; higher-level courses in the same area may be substituted, though. See the VCU website for further information on AP/IB credit.

VCU Requirement	W&M Course(s)
8 credits General Biology with lab	BIOL 203/203L and BIOL 204/204L
8 credits General Chemistry with lab	CHEM 103/103L and 208/254
8 credits Organic Chemistry with lab	CHEM 206/206L and 209/253 or 207/253
4 credits Physics with lab	PHYS 101/101L or PHYS 107/107L
3 credits Human Anatomy (lab is also recommended)	KINES 303 (KINES 314 or 315 recommended)
3 credits Human Physiology	KINES 304
3 credits Microbiology (taking the lab is also preferred)	BIOL 306: Microbiology
3 credits Biochemistry	CHEM 314: Biochemistry
6 credits English (at least 1 semester of composition/ rhetoric required; COLL 150 courses count)	COLL 150 seminars; English literature or composition courses
3 credits Calculus	MATH 111 or MATH 131 (Note that MATH 108 is not a pre-pharmacy calculus course!)
3 credits Statistics	MATH 106 or PSY 301 or KINE 394 or Biostatistics
6 credits English	COLL 150, any English Department literature or composition course

Many pre-pharmacy students at the College choose to major in either Biology, Chemistry, or Neuroscience, as the courses required for these majors overlap extensively with the courses required for pharmacy school.

Representatives of the VCU School of Pharmacy have told us that William & Mary students with GPAs of 3.4 or better are generally competitive for admission to VCU.

PCAT

The PCAT, taken at the time at which students start applying to pharmacy school (usually at the end of the

junior year of college) is the standardized test required for pharmacy school admission. The PCAT website, <http://pcatweb.info>, offers comprehensive information about this exam.

The PCAT, which is now a computer-based exam, covers a wide variety of topics, including reading, writing and verbal reasoning; biology, including general biology, microbiology, and anatomy/physiology; inorganic and organic chemistry; and quantitative reasoning, including math through calculus.

Representatives of the VCU School of Pharmacy have told us that students with PCAT scores above the 70th percentile are generally competitive for admission to VCU.

Pharmacy Experience

In addition to a strong GPA and solid PCAT scores, competitive applicants also have a great deal of pharmacy experience. The VCU School of Pharmacy recommends that pre pharmacy students become certified as pharmacy techs and then find jobs that will allow them to use this training, such as work in a retail pharmacy setting. Volunteer positions with organizations such as free clinics that allow students to use their pharmacy tech training are also acceptable. Some pharmacies will allow students to start working before becoming certified.

In addition to employment in a pharmacy setting, students can also shadow pharmacists. At William & Mary, the Cohen Career Center has helped students find such shadowing opportunities in the past. Contact Don Snyder, the Career Center's science liaison, for details.