



Pre-Pharmacy Course Requirements for the Doctor of Pharmacy [Pharm.D.] Program

Chemistry

General Chemistry I with lab – 4 hrs
General Chemistry II with lab - 4 hrs
^aOrganic Chemistry I with lab - 4 hrs
^aOrganic Chemistry II with lab - 4 hrs

Writing & Communications:

English Composition I – 3 hrs
^hEnglish Composition II – 3 hrs
Communications – 3 hrs

Other:

^e US Constitution course [American History I or II or Political Science/American Government] - 3 hrs
^a Medical Terminology - 1 hr

Biology/Human Biology:

^bGeneral Biology I (Botany) - 3 hrs
^bGeneral Biology II (Zoology) - 3 hrs
^a^dHuman Anatomy with lab - 4 hrs
^a^fCell Biology - 3 hrs
^a^gMicrobiology with lab - 4 hrs

Math and Physics:

^cCalculus I - 4 hrs
General Physics with lab - 4 hrs

^a Marked courses must be completed within five years prior to the start of the Pharm.D. program.

^b Introductory Biology will not count for General Biology I or II. Genetics can count as one of the biology courses.

^c Calculus must contain Analytical Geometry and be at least 4 cr hrs. One semester of Business Calculus will not count.

^d Two semesters or 5.0 credit hours or more of a combined Human Anatomy and Physiology with lab will meet the Human Anatomy requirement.

^e World History will not meet the requirement. Students with a previous baccalaureate degree from a regionally accredited institution in the U.S. are exempt.

^f Must have General Biology or Genetics as a prerequisite.

^g Microbiology should be medical based.

^h A writing intensive (WI) course may substitute. WI courses require at least 5,000 words written during the course and at least 40% of the final grade is based on writing assignments.

- Credit hours listed are minimum requirements and are based on semester hours.
 - Please refer to the [course transfer sheets on our website](#) for course numbers at other colleges.
 - All course requirements must be completed with a minimum grade of C-.
 - Pre-pharmacy courses do not have to be completed prior to application, however, they must be successfully done before the beginning of the fall semester of entry into the Pharm.D. Program.
 - Pre-Pharmacy courses must be completed from regionally accredited Institutions in the US.
 - On-Line courses are acceptable.
- Students & their academic advisor should meet each semester to best decide how to complete coursework. Admission to the Pharm.D. program is competitive; therefore, grades achieved, especially in science & math courses, are very important in the admissions review process. Students should have a flexible plan that ensures courses are completed in the proper sequence and high academic achievement is earned, as opposed to how quickly the courses are completed.
- Students with elective space during their pharmacy preparation should consider courses that shape the understanding of the human condition. Courses in psychology, sociology, philosophy and anthropology will assist a student in assuming their role in caring for the people who are ill and disadvantaged. Completion of additional communication studies courses are also encouraged to provide greater proficiency in working with people in a variety of settings and situations.
- Applicants who have courses obtained through Advanced Placement (AP) and International Baccalaureate (IB) credit must have official scores sent from the testing agency to the UMKC Records Office. Refer to information regarding standardized scores and transferability: <http://www.umkc.edu/registrar/transfer-credit/default.asp>