



Prerequisite Courses for Entry into the Doctor of Pharmacy [Pharm.D.] Program

Chemistry

General Chemistry I with lab - 4-5 hours
General Chemistry II with lab - 4-5 hours
^aOrganic Chemistry I with lab - 4 hours
^aOrganic Chemistry II with lab - 4 hours

Writing & Communications:

English Composition I – 3 hours
English Composition II – 3 hours
Communications – 3 hours

Other:

US Constitution course [American History I or II or Political Science/American Government] - 3 hours
^aMedical Terminology - 1 hour

Biology/Human Biology:

^bGeneral Biology I (Botany) -3 hours
^bGeneral Biology II (Zoology) - 3 hours
^a^dHuman Anatomy with lab - 4 hours
^aCell Biology - 3 hours
^aMicrobiology with lab - 4 hours

Math and Physics:

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

Key:

- ^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. Business Calculus is not equivalent.
- ^d Two semesters of Human Anatomy and Physiology will meet the Human Anatomy requirement.
- ^e UMKC Pre-Pharmacy students will take Discourse 100/Anchor 1 & Discourse 200/Anchor 2.

NOTES:

- Credit hours listed are based on semester hours.
 - Please refer to the [equivalency pages on our website](#) for course number equivalents at other colleges.
 - All prerequisites must be completed with a minimum grade of C.
 - Prerequisite 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.
- The prerequisite courses can be completed in two or three years. Students & their academic advisor should meet each semester to best decide how to complete the prerequisites. 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 prerequisites can be 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 the following website for information regarding standardized scores and transferability:
<http://www.umkc.edu/registrar/transfer-credit/default.asp>