

Pre-Pharmacy Course Requirements for the UMKC Doctor of Pharmacy Program

Chemistry

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

Writing & Communications

English Composition I – 3 cr. hrs.
^hEnglish Composition II – 3 cr. hrs.
ⁱCommunications – 3 cr. hrs.

Other

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

Biology/Human Biology

^b General Biology I or Botany - 3 cr. hrs.
^b General Biology II or Zoology - 3 cr. hrs.
^a^d Human Anatomy with lab - 4 cr. hrs.
^a^f Cell Biology - 3 cr. hrs.
^a^g Microbiology with lab - 4 cr. hrs.

Math and Physics

^c Calculus I - 4 cr. hrs.
 Physics with lab (Alg/Trig based) – 4 cr. hrs.
^j Statistics – 3 cr. 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 credits or more of Human Anatomy & Physiology with lab will meet the Anatomy requirement.
- ^e World History will not meet the requirement. Students with a 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 medically 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.
- ⁱ Courses covering public speaking, group dynamics, interpersonal or intercultural communications will count.
- ^j Required for Fall 2022 entry and beyond.

- Credit hours listed are minimum requirements and are based on semester hours.
- GPA minimum requirements to apply with all grades averaged together: 2.75 cumulative college; 2.5 science/math
 - Please refer to the [course transfer sheets on our website](#) for course numbers at other colleges.
 - All pre-pharmacy courses must be completed with a minimum grade of C-. On-line courses are acceptable.
 - Pre-pharmacy courses do not have to be completed prior to application, however, courses must be successfully completed before the beginning of the fall semester of entry into the Pharm.D. Program.
 - Pre-pharmacy courses must be completed from regionally accredited Institutions. Foreign credit earned in General Chemistry, General Biology, Calculus, Physics, Communications, & Organic Chemistry I may transfer if approved as equivalent by UMKC International Student Affairs and meets the grade and timeline requirements.
- 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 people. 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 with 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>