

Required Pre-Pharmacy Courses

Course Transfer Sheet University of Kentucky

The Doctor of Pharmacy (Pharm.D.) program requires satisfactory completion (grade of C- or higher) of all specific pre-pharmacy college course work before entry into the first semester of the program (UMKC only offers fall entry). Online courses will count.

Below are the courses approved to transfer from University of Kentucky towards pre-pharmacy requirements. Admission to the Pharm.D. program is competitive, with college grades, Pharmacy College Admission Test (PCAT) scores, pharmacy experience, communication skills, and a formal interview being key determinants. A degree is not required for admission.

Note: Courses listed below meet the UMKC pre-pharmacy course requirements for the Pharm.D. program. These courses do not necessarily reflect what other programs at UMKC consider towards a Bachelor's degree.

REQUIRED COURSES KENTUCKY COURSES

English Composition I ENG 101

English Composition II ENG 102 or 301

Communication Studies COM 101 or 181 or 252 or 281 U.S. History or American Government HIS 108 or HIS 109 or PS 101

Calculus w/Analytical Geometry MA 113
Statistics (Required for Fall 2022 Entry & Beyond) STA 210
General Physics w/ lab PHY 211

General Chemistry I w/ lab CHE 105/111 or 109 & 110/111

General Chemistry II w/lab CHE 107/113
General Biology I or Botany BIO 148 or BIO 351
General Biology II or Zoology BIO 152 or BIO 350

BIO 304 will suffice for General Biology 1 or 2

The courses below must be taken within five years prior to the fall start of the Pharm.D. program:

Organic Chemistry I w/ lab CHE 230/231
Organic Chemistry II w/ lab CHE 232/233
Cell Biology BIO 315

Microbiology w/lab BIO 208/209 or BIO 308/209

Medical Terminology CLA 131 Human Anatomy w/lab BIO 440

Optional – Successful completion of Biochemistry I & II may transfer into the Pharm.D. Curriculum

Pharmacy Biochemistry BCH 401G & 419G

- Please review your school's test credit policy regarding AP, IB, CLEP, etc.
- Transfer sheets for other local schools: https://pharmacy.umkc.edu/admissions/transfer-sheets.html.

Additional Notes for UMKC Pre-Pharmacy Prerequisite Courses

Please contact staff from the Pharmacy Office of Student Affairs (POSA) with any questions you have.

- -Online courses may count, and the POSA staff know of several online options for courses. Grades of P, Cr &/or S (Pass, Credit &/or Satisfactory) from the Spring & Summer 2020 semesters will suffice.
- -If you took a marked course that is older than five years, and you believe your knowledge of the course is current based on courses taken since then within five years of admission or through your current job responsibilities, you can petition the old course to count. Contact POSA to inquire about the process and documentation needed.
- -Courses that may transfer from foreign institutions: Physics with lab, Calculus, Statistics, General Chemistry 1 & 2 with labs, Organic Chemistry 1 with lab, or General Biology 1 & 2. All remaining courses must be completed from a regionally accredited college or university inside of the USA.

English Composition 1 & 2: Six hours are required. If a student takes an advanced composition course, or tests into Eng Comp 2, the student can take an additional writing course where 5,000 words or 20 written pages (usually noted as a 'Writing Intensive' course). Eng Comp 1 may be completed by earning a minimum required score on the AP Eng Language & Composition (minimum score requirements vary by institution). AP Eng Literature & Composition will not count.

<u>Communication Studies</u> can be complete by any course in the subject. Interpersonal communication, public speaking or small group dynamics are great examples.

<u>U.S. Constitution</u> can be complete by U.S. History 1 or 2, American Government, or a Bachelor's degree from inside of the USA.

Physics with lab should be a college-level, trig based (or higher) Physics course with lab.

<u>Calculus with Analytical Geometry</u> can be complete by Calculus courses that require trigonometry as a prerequisite. Business Calculus will not count, unless it is followed by an additional Business Calculus 2 course.

<u>Statistics</u> is required for students entering the Pharm.D. program in Fall 2022 and later and may be complete with an introduction to statistics or biostatistics course. If your major offers a statistics course, please send syllabus to POSA for review.

Organic Chemistry 1 & 2 with labs can be complete by a two-sequence organic chemistry with labs structure. Some schools offer a one 2.0 credit hour lab, while others offer two 1.0 credit hour labs. Either is fine.

<u>General Biology 1 & 2</u> may be complete by any two of the following courses: general biology 1, general biology 2, zoology, botany, genetics, or human physiology. Labs are not required. Essentials of Biology or Biology for Nonmajors do not count.

<u>Cell Biology</u> may be complete by a sophomore-level cell biology course that has general biology and general chemistry as a prerequisite. A lab is not required.

<u>Microbiology with lab</u> may be complete by a sophomore-level Microbiology course for future health professionals. Environmental Microbiology lecture & lab will not count.

<u>Human Anatomy with lab</u> may be complete by a human anatomy with lab course, or a five-hour human anatomy & physiology with lab course, or by a two-sequenced human anatomy & physiology 1 & 2 with labs structure.

Medical Terminology should be 1.0 credit hour or more. UMKC offers an online 1.0 hour course each semester.

<u>Biochemistry 1 & 2</u> are not required for entry, and may be complete by two semesters of general biochemistry 1 & 2. Students who take introduction to biochemistry or biochemistry 1 and are looking for Biochem 2, the POSA knows of online options. Labs are not required. A 4.0 credit Biochemistry with lab course will not count. Students who complete an approved biochemistry 1 & 2 sequence may not have to take Pharmacy Biochemistry in their first semester of the Pharm.D. curriculum.