



**Prerequisite Courses for Entry into the
Doctor of Pharmacy [Pharm.D.] Program
8/2014**

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

^eWriting & Communications:

English Composition I - 3 hours
English Composition II - 3 hours
Communication Studies Course - 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. 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 AP scores and transferability:
<http://www.umkc.edu/registrar/transfer-credit/default.asp>

Pharm. D. Curriculum – Class of 2018 forward

<p style="text-align: center;">Semester 1 (Fall)</p> <p>PHAR 7341 Medicinal Chemistry I 3.0 LSPHYS 399 Pharmacy Physiology I 3.0 LSBIOC 370 Pharmacy Biochemistry 4.0 PHAR 7101 Introduction to the Professional Degree Program and Pharmacy Practice 1.0 PHAR 7101L Applied Skills Lab: Professional Program and Pharmacy Practice 1.0 PHAR 7110 Pharmacy Calculations 2.0 PHAR 7151 Introduction to Pharmacy Law 1.0 PHAR 7245 Top 200 Drugs I 0.5 <u>Required Hours</u> 15.5 <i>Professional Electives (1-8)</i></p>		<p style="text-align: center;">Semester 2 (Spring)</p> <p>PHAR 7344 Medicinal Chemistry II 3.0 LSPHYS 400 Pharmacy Physiology II 3.0 PHAR 7414 Patient Centered Communication & Ethical Practice 2.0 PHAR 7414L Applied Skills Lab: Patient Centered Communication & Ethical Practice 0.5 PHAR 7279 Introductory Pharmacy Practice Experience I 0.5 PHAR 7202 Pharmaceutics I PHAR 7233 U.S. Health Care System and Marketing 3.5 PHAR 7361 Pharmacology I 3.0 <u>Required Hours</u> 2.0 <i>Professional Electives (1-8)</i> 17.5</p>	
<p style="text-align: center;">Semester 3 (Fall)</p> <p>PHAR 7362 Pharmacology II 4.0 PHAR 7307 Advanced Pathophysiology 4.0 PHAR 7465 Health Economics and Medicine 3.0 PHAR 7345 Top 200 Drugs II 0.5 PHAR 7325 Professional Communication 2.0 PHAR 7325L Applied Skills Lab: Professional Communication 0.5 PHAR 7434 Pharmacy Preparations-Compounding 1.0 PHAR 7434L Applied Skills Lab: Pharmacy Preparations-Compounding 0.5 PHAR 7280 Introductory Pharmacy Practice Experience II 0.5 PHAR 7203 Pharmaceutics II 3.0 <u>Required Hours</u> <i>Professional Electives (1-8)</i> 19.0</p>		<p style="text-align: center;">Semester 4 (Spring)</p> <p>PHAR 7363 Pharmacology III 4.0 PHAR 7303 Pharmacokinetics & Biopharmaceutics 3.0 PHAR 7405 Pharmacotherapy I 3.0 PHAR 7405L Applied Skills Lab: Pharmacotherapy I 1.0 PHAR 7334 Pharmacy-Based Immunization Delivery 1.0 PHAR 7331L Applied Skills Lab: Aseptic Technique and Sterile Product Prep 0.5 PHAR 7463 Clinical Toxicology 2.0 <u>Required Hours</u> 14.5 <i>Professional Electives (1-8)</i></p>	
<p>Semester 4a (Summer)</p> <p>PHAR 7378 – IPPE: Introduction to Community Pharmacy Practice 2.0 PHAR 7379 – IPPE: Introduction to Health Systems Pharmacy Practice 2.0 Maximum Hours 4.0</p>			
<p style="text-align: center;">Semester 5 (Fall)</p> <p>PHAR 7420 Pharmacotherapy II 7.0 PHAR 7420L Applied Skills Lab: Pharmacotherapy II 0.5 PHAR 7326 Evidence Based Medicine 5.0 PHAR 7406P General Medicine I 2.0 (approximately 45 hours per semester) <u>Required Hours</u> 14.5 <i>Professional Electives (1-8)</i></p>		<p style="text-align: center;">Semester 6 (Spring)</p> <p>PHAR 7485P Pharmacotherapy III 7.0 PHAR 7485L Applied Skills Lab: Pharmacotherapy III 0.5 PHAR 7389 Advances in Drug Therapy 2.0 PHAR 7451 – Pharmacy Law 2.0 PHAR 7466 Pharmacy Practice Management 3.0 <u>Required Hours</u> 14.5 <i>Professional Electives (1-8)</i></p>	
<p>Advanced Pharmacy Practice Experiences Note: APPEs may begin in summer (36 credit hours)</p>			
<p>Semester 7 (Fall)</p> <p>Advanced Pharmacy Practice Experiences Hours Vary</p>		<p>Semester 8 (Spring)</p> <p>Advanced Pharmacy Practice Experiences Hours Vary</p>	