Pre-Pharmacy



The degree needed to practice pharmacy is called the Doctor of Pharmacy, or the "Pharm. D." The college work for this degree is divided into two parts: the pre-pharmacy curriculum and the professional curriculum. The pre-pharmacy curriculum can be taken at the pharmacy school or at another college or university, whereas the professional curriculum must be taken at a school of pharmacy. Pre-professional requirements for pharmacy are available through the Department of Chemistry and Physics.

In general, students may fulfill two or three years at Southeast of the total six-year curriculum, then complete the training at a professional school. Although the first-year requirements at most pharmacy schools are similar, there are significant differences with some schools. Second-year requirements vary even more from school to school. Therefore, the pre-pharmacy student should be sure of his/her preferred school's requirements. The student should also be aware that few, if any, pharmacy schools accept transfer students for the spring semester, so the student should plan coursework accordingly. Most pre-professional curricula place a strong emphasis on biology, chemistry and mathematics. Various other non-science courses are usually required, such as English and social science courses. A student should use the specific requirements of the schools he/she would prefer to attend in planning a course of study. Admission into Pharm. D. programs is competitive. Pharmacy schools take into consideration course grades, PCAT scores, previous pharmacy experience and communication skills.

Although the Pharm. D. programs at most pharmacy schools allow students to by-pass the bachelor's degree, there are some advantages to completing a bachelor's degree program prior to entering the Pharm. D. program. Pre-pharmacy students should consult with their faculty advisors to discuss the advantages and disadvantages of pursuing the bachelor's degree prior to entering a Pharm. D. program.

Becoming Career Ready...

/ Faculty-mentored learning and guidance will help you develop the professional skills needed for success in a competitive job market and/or advanced study in graduate and professional programs.

/ Upon successful completion of the pre-pharmacy curriculum students are prepared for the professional pharmacy program because of the foundation of chemistry, science and math they receive within the context of a broad university education.

/ Pre-pharmacy students will study in the state-of-the-art, first-rate learning environment provided by the recently renovated Magill Hall of Science while gaining hands-on experience and training using a variety of lab equipment, chemical instruments, and tools in laboratory courses and undergraduate research.

Career Opportunities:

- Retail pharmacist
- Hospital pharmacist
- Clinical pharmacist
- Industrial pharmacy
- Pharmaceutical salesUniversity teaching and research
- Graduate study in pharmaceutical science (pharmacology, medicinal chemistry, physical pharmacy), chemistry or biology.

Career Information

To learn more about career opportunities in pharmacy visit: https://www.pharmacist.com.

According to the United States Bureau of Labor Statistics, there were 312,500 pharmacy related jobs in 2016. This number is expected to increase by 6% by 2026. Source: https://www.bls.gov/ooh/healthcare/pharmacists.htm.

If the path to a successful career starts with you! You can maximize your career development by working closely with Career Services and Southeast faculty – they are here to help you connect your passions, interests and skills to jobs and opportunities in the field. Career Services provides professional career counseling and coaching, resume critiques, practice interviews, job search strategies, career events, networking opportunities and more.

Transfer and Dual Credit Students

If you have dual credit or transfer credit, please visit our transfer course equivalencies guide at semo.edu/transfercredit.

Pre-Pharmacy



EXAMPLE CURRICULA	
University of Missouri-Kansas City School of Pharmacy	
BI173 Cell and Organismal Biology (4)	EC215 Principles of Microeconomics (3)
Bl283 Genetics (4)	EN100 English Composition (3)
BI310 Microbiology (4)	EN140 Rhetoric and Critical Thinking (3)
BI404 Cell Biology (3)	MA223 Elementary Probability and Statistics (3)
BS113/013 Anatomy and Physiology I (4)	MA139 Applied Calculus (3)
BS114/014 Anatomy and Physiology II (4)	PH120/020 Introductory Physics I (5)
CH184 General Chemistry I Lab (1)	SC105 Fundamentals of Oral Communication (3)
CH185 General Chemistry I (3) CH186 General Chemistry II (3)	PY101 Introduction to Psychology (3) or SO102 Society, Culture and Social
— CH187 General Chemistry II Lab (1)	Behavior (3)
CH341 Foundations of Organic Chemistry (4)	Social Science Elective (3)
CH342 Organic Chemistry Laboratory I (1)	Humanities, e.g. Art, History, Music, Literature, Modern Languages, etc. (12)
CH343 Advanced Organic Chemistry (3)	Writing Intensive/Writing Emphasis/Professional Writing Electives (6) (at the
CH344 Organic Chemistry Lab II (2)	300/400 level)
EN100 English Composition (3)	*StLCoP also has a B.S./Pharm.D. program. For more information, contact
EN140 Rhetoric and Critical Thinking (3)	the Department of Chemistry & Physics chairperson.
HL113 Medical Terminology (3)	University of Mississippi School of Pharmacy
MA140 Analytical Geometry and Calculus I (5)	BI163 Evolution and Ecology (4) BI173 Cell and Organismal Biology (4)
PH120/020 Introductory Physics I (5)	BI283 Genetics (4)
SC105 Fundamentals of Oral Communication (3) or SC155 Interpersonal	BI310 Microbiology (4)
Communication (3) or SC215 Intercultural Communication (3) or SC320 Group	BI404 Cell Biology (3)
Communication and Decision Making (3)	BI413 Molecular Genetics (3)
US105 American History I (3) or US107 American History II (3) or PS103 U.S.	BI442 Immunology (4)
Political Systems (3)	BI543 Pathogenic Microbiology (2)
Not a prerequisite, but can transfer into Pharm. D. curriculum:	BI544 Pathogenic Microbiology Laboratory (1)
CH531 Foundations of Biochemistry (3)	BS113/013 Anatomy and Physiology I (4) and BS114/014 Anatomy and
CH532 Advanced Biochemistry (2)	Physiology II (4) or BS332 Human Physiology (3)
Southorn Illinois University Edwardsville School of	CH184 General Chemistry I Lab (1)
Southern Illinois University-Edwardsville School of	CH185 General Chemistry I (3)
Pharmacy	CH186 General Chemistry II (3)
BI163 Evolution and Ecology (4)	CH187 General Chemistry II Lab (1)
BI173 Cell and Organismal Biology (4) BI283 Genetics (4)	CH341 Foundations of Organic Chemistry (4)
BI310 General Microbiology (4)	CH342 Organic Chemistry Laboratory I (1) CH343 Advanced Organic Chemistry (3)
BS113 Anatomy and Physiology I (4)	— CH344 Organic Chemistry Lab II (2)
BS114 Anatomy and Physiology II (4)	CH531 Foundations of Biochemistry (3)
CH184 General Chemistry I Lab (1)	CH532 Advanced Biochemistry (2)
CH185 General Chemistry I (3)	EC215 Principles of Microeconomics (3)
CH186 General Chemistry II (3)	EN100 English Composition (3)
CH187 General Chemistry II Lab (1)	EN140 Rhetoric and Critical Thinking (3)
CH341 Foundations of Organic Chemistry (4)	MA139 Applied Calculus (3) or MA140 Analytical Geometry and Calculus I (5)
CH342 Organic Chemistry Laboratory I (1)	MA223 Elementary Probability and Statistics (3) or PY271 Introduction to
CH343 Advanced Organic Chemistry (3)	Behavioral Statistics (3)
CH344 Organic Chemistry Lab II (2)	PH120/020 Introductory Physics I (5)
EC101 Economics Problems and Policies (3) or EC215 Principles of	PH121/021 Introductory Physics II (5)
Microeconomics (3) or EC225 Principles of Macroeconomics (3) EN100 English Composition (3)	SC105 Fundamentals of Oral Communication (3)
EN140 English Composition (3) EN140 Rhetoric and Critical Thinking (3)	UI352 Medical Ethics (3)
MA140 Analytical Geometry and Calculus I (5)	Harding University College of Pharmacy
MA223 Elementary probability and Statistics (3)	BI173 Cell and Organismal Biology (4)
PH120/020 Introductory Physics I (5)	BI283 Genetics (4) BI310 General Microbiology (4)
Any Philosophy (PL) Course (3)	CH184 General Chemistry I Lab (1)
PY101 Introduction to Psychology (3) or SO102 Society, Culture and Social	— CH185 General Chemistry I (3)
Behavior (3)	CH186 General Chemistry II (3)
SC105 Fundamentals of Oral Communication (3) or SC155 Interpersonal	CH187 General Chemistry II Lab (1)
Communication (3), or SC314 Augmentation and Problem Solving (3)	CH341 Foundations of Organic Chemistry (4)
St. Louis College of Pharmacy*	CH342 Organic Chemistry Laboratory I (1)
BI163 Evolution and Ecology (4)	CH343 Advanced Organic Chemistry (3)
BI173 Cell and Organismal Biology (4)	CH344 Organic Chemistry Lab II (2)
BI283 Genetics (4)	CH531 Foundations of Biochemistry (3)
BI310 Microbiology (4)	EC215 Principles of Microeconomics (3) or EC225 Principles of
BS113/013 Anatomy and Physiology I (4)	Macroeconomics (3) or AC221 Principles of Accounting I (3)
BS114/014 Anatomy and Physiology II (4)	EN100 English Composition (3)
CH185/085/005 General Chemistry (5)	EN140 Rhetoric and Critical Thinking (3)
CH186 Foundations of Inorganic Chemistry (3)	MA140 Analytical Geometry and Calculus I (5)
CH187 Inorganic Chemistry and Qualitative Analysis Laboratory (2) CH341 Foundations of Organic Chemistry (4)	MA223 Elementary probability and Statistics (3)
CH341 Foundations of Organic Chemistry (4) CH342 Organic Chemistry Laboratory I (1)	PY101 Introduction to Psychology (3) or SO102 Society, Culture and Social
CH342 Organic Chemistry Laboratory 1(1) CH343 Advanced Organic Chemistry (3)	Behavior (3) SC105 Fundamentals of Oral Communication (3)
CH344 Organic Chemistry Lab II (2)	SC105 Fundamentals of Oral Communication (3) Electives (5-6)
CH531 Foundations of Biochemistry (3)	

CH531 Foundations of Biochemistry (3)