

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 College of Science, Technology, and Agriculture. In general, students may fulfill two years at Southeast of the total six-year curriculum, then complete the training at a professional school. However, there are exceptions. Some schools, such as the University of Mississippi, have three years of pre-pharmacy, with a seven-year program. 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 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.

Pre-pharmacy students will...

- Gain a strong foundation in chemistry, science, and math which will prepare them for the rigors of the professional pharmacy program curriculum.
- Interact closely with experienced faculty in and out of the classroom who are recognized for their writing, training, professional affiliations, and expertise.
- Study in the state-of-the-art, first-rate learning environment provided by the newly renovated Magill Hall of Science.

Career Opportunities

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

Career Planning

With a Doctor of Pharmacy degree, graduates are prepared for the practice of pharmacy in a variety of settings. The majority of graduates practice either in an independent pharmacy or chain store pharmacy, or in a hospital. Others go into industry as sales representatives or liaisons with federal and state governments, or in the preparation, analysis, and testing of new drug compounds. Some pharmacists continue their education and obtain PhD or medical degrees, pursuing careers in clinical pharmacy, research, or education. Salaries for licensed Doctor of Pharmacy graduates start at around \$100,000.

Career preparation is part of the mission of Southeast. 100% of programs offer our students an internship, study-abroad program, clinical opportunity, student teaching or research internship

The Office of Career Services in Academic Hall 057 can provide students with professional career counseling and coaching, resume critiques, practice interviews, job search strategies, career events, networking opportunities, and more.

Demonstrated Career Proficiency is a Requirement of all Southeast Students

CL001	First Semester	Students connect academic career planning by completing an online career assessment
CL002	Second Semester	Students learn more about resources available to enhance academic and career planning
CL003	Junior Year	Students learn about continued career planning, job search strategies, and networking
CL004	Senior Year	Students learn about resume development, professional communication, interviewing, and transitioning to the first job from college

To learn more
Office of Admissions
(573) 651-2590
admissions@semo.edu
www.semo.edu

To explore the College of Science, Technology and Agriculture online, visit
www.semo.edu/costa

For advising
Center for Academic Advising - North
(573) 651-5090
www.semo.edu/advising
advisingnorth@semo.edu

EXAMPLE CURRICULA**University of Missouri-Kansas City School of Pharmacy**

- ___ BI163 Evolution and Ecology (4) or ZO200 Animal Biology (3)
- ___ BI173 Cell and Organismal Biology (4) or BO200 Plant Biology (4)
- ___ BI283 Genetics (4)
- ___ BI310 Microbiology (4)
- ___ BI404 Cell Biology (3)
- ___ BI413 Molecular Genetics (3)
- ___ BI543 Pathogenic Microbiology (2)
- ___ BI544 Pathogenic Microbiology Laboratory (1)
- ___ BS113/013 Anatomy and Physiology I (4)
- ___ BS114/014 Anatomy and Physiology II (4)
- ___ CH185/085/005 General Chemistry (5)
- ___ CH186 Foundations of Inorganic Chemistry (3)
- ___ CH187 Inorganic Chemistry and Qualitative Analysis Laboratory (2)
- ___ CH341 Foundations of Organic Chemistry (4)
- ___ CH342 Organic Chemistry Laboratory I (1)
- ___ CH343 Advanced Organic Chemistry (3)
- ___ CH344 Organic Chemistry Lab II (2)
- ___ EN100 English Composition (3)
- ___ EN140 Rhetoric and Critical Thinking (3)
- ___ HL113 Medical Terminology (3)
- ___ MA140 Analytical Geometry and Calculus I (5)
- ___ PH120/020 Introductory Physics I (5)
- ___ SC105 Fundamentals of Oral Communication (3)
- ___ US105 American History I (3) or US107 American History II (3) or PS103 U.S. Political Systems (3)

Recommended but not required

- ___ CH531 Foundations of Biochemistry (3)
- ___ CH532 Advanced Biochemistry (2)

Southern Illinois University-Edwardsville School of Pharmacy

- ___ BI163 Evolution and Ecology (4)
- ___ BI173 Cell and Organismal Biology (4)
- ___ BS113 Anatomy and Physiology I (4)
- ___ BS114 Anatomy and Physiology II (4)
- ___ CH185 General Chemistry (5)
- ___ CH186 Foundations of Inorganic Chemistry (3)
- ___ CH187 Inorganic Chemistry and Qualitative Analysis Laboratory (2)
- ___ CH341 Foundations of Organic Chemistry (4)
- ___ CH342 Organic Chemistry Laboratory I (1)
- ___ CH343 Advanced Organic Chemistry (3)
- ___ CH344 Organic Chemistry Lab II (2)
- ___ EC101 Economics Problems and Policies (3) or EC215 Principles of Microeconomics (3) or EC225 Principles of Macroeconomics (3)
- ___ EN100 English Composition (3)
- ___ EN140 Rhetoric and Critical Thinking (3)
- ___ MA140 Analytical Geometry and Calculus I (5)
- ___ PH120/020 Introductory Physics I (5)
- ___ PH121/021 Introductory Physics II (5)
- ___ PL110 Readings in Philosophy (3) or PL200 Symbolic Logic I (3)
- ___ PY101 Psychological Perspectives on Human Behavior (3) or PY102 Introduction to Psychology (3) or SO102 Society, Culture and Social Behavior (3) or SO200 Introduction to Social Organizations (3)
- ___ SC105 Fundamentals of Oral Communication (3) or SC155 Interpersonal Communication (3), or SC314 Augmentation and problem Solving (3)
- ___ Humanities, e.g. Art, Music, or Literature (3) (no performance courses)

St. Louis College of Pharmacy

- ___ BI163 Evolution and Ecology (4)
- ___ BI173 Cell and Organismal Biology (4)
- ___ BI283 Genetics (4)
- ___ BI310 Microbiology (4)
- ___ BS113/013 Anatomy and Physiology I (4)
- ___ BS114/014 Anatomy and Physiology II (4)
- ___ CH185/085/005 General Chemistry (5)
- ___ CH186 Foundations of Inorganic Chemistry (3)
- ___ CH187 Inorganic Chemistry and Qualitative Analysis Laboratory (2)
- ___ CH341 Foundations of Organic Chemistry (4)
- ___ CH342 Organic Chemistry Laboratory I (1)
- ___ CH343 Advanced Organic Chemistry (3)
- ___ CH344 Organic Chemistry Lab II (2)
- ___ CH531 Foundations of Biochemistry (3)
- ___ EC215 Principles of Microeconomics (3)
- ___ EN100 English Composition (3)
- ___ EN140 Rhetoric and Critical Thinking (3)
- ___ HL 105 Introduction to Allied Health Professions (3)
- ___ MA223 Elementary Probability and Statistics (3)
- ___ MA139 Applied Calculus (3)
- ___ PH120/020 Introductory Physics I (5)
- ___ SC105 Fundamentals of Oral Communication (3)
- ___ SO102 Society, Culture and Social Behavior (3)
- ___ SO205 Social Problems in America (3)
- ___ Humanities, e.g. Art, History, Music, Literature, etc. (12)

University of Mississippi School of Pharmacy

- ___ BI163 Evolution and Ecology (4) or ZO200 Animal Biology (3)
- ___ BI173 Cell and Organismal Biology (4) or BO200 Plant Biology (4)
- ___ BI283 Genetics (4)
- ___ BI310 Microbiology (4)
- ___ BI404 Cell Biology (3)
- ___ BI413 Molecular Genetics (3)
- ___ BI442 Immunology (3)
- ___ BI543 Pathogenic Microbiology (2)
- ___ BI544 Pathogenic Microbiology Laboratory (1)
- ___ BS113/013 Anatomy and Physiology I (4) and BS114/014 Anatomy and Physiology II (4) or BS332 Human Physiology (3)
- ___ CH185/085/005 General Chemistry (5)
- ___ CH186 Foundations of Inorganic Chemistry (3)
- ___ CH187 Inorganic Chemistry and Qualitative Analysis Laboratory (2)
- ___ CH341 Foundations of Organic Chemistry (4)
- ___ CH342 Organic Chemistry Laboratory I (1)
- ___ CH343 Advanced Organic Chemistry (3)
- ___ CH344 Organic Chemistry Lab II (2)
- ___ CH531 Foundations of Biochemistry (3)
- ___ CH532 Advanced Biochemistry (2)
- ___ EC225 Principles of Macroeconomics (3)
- ___ EN100 English Composition (3)
- ___ EN140 Rhetoric and Critical Thinking (3)
- ___ MA140 Analytical Geometry and Calculus I (5)
- ___ MA223 Elementary Probability and Statistics (3) or PY271 Research Design and Analysis I (3)
- ___ PH120/020 Introductory Physics I (5)
- ___ PH121/021 Introductory Physics II (5)
- ___ SC105 Fundamentals of Oral Communication (3)
- ___ UI352 Medical Ethics (3)
- ___ Non-professional Electives
Social or Behavioral Sciences (6)
Humanities and fine arts (9) (minimum of 3 hours in each of these areas)