SMU PRE-HEALTH PROFESSIONS
Suggested Pre-Pharmacy Plan
Note: Some science courses may be completed in summer terms.

Individual program requirements may change at any time, and this plan may not reflect the most current information. It is the student's responsibility to review, understand, follow, and remain up-to-date with the policies, guidelines, and requirements (including pre-requisite coursework) of each individual pharmacy program and the application service PharmCAS.

This plan could vary depending on the major chosen. Consult your academic advisor and check individual degree plans for suggested sequencing of courses. Grades of C (not C-) or better are required to meet specific science (and math) pre-requisites for admission to pharmacy school. **Consult with your advisor before advancing to the next level course**. Combined science and math pre-requisites include courses coded as biology, chemistry, physics, and math (including statistics). **The Pharmacy College Admission Test (PCAT®) was retired on January 10, 2024.** No PCAT testing dates will be offered during the 2024–2025 admissions cycle or beyond.

		1st Year Fall				1st Year Spring
CHEM	1303	General Chemistry I		CHEM	1304	General Chemistry II
CHEM	1113	General Chemistry I Lab		CHEM	1114	General Chemistry I Lab
BIOL	1301	Introductory Biology I		BIOL	1302	Introductory Biology I
BIOL	1101	Introductory Biology I Lab		BIOL	1102	Introductory Biology I Lab
DISC	1312	Discernment and Discourse (UC 2016)		DISC	1313	Discernment and Discourse (UC 2016)
WRTR	1312	Introduction to Academic Writing (CC 2020)		WRTR	1313	Writing and Critical Reasoning (CC 2020)
MATH	1337	Calculus		STAT	2331	Statistics

		2nd Year Fall				2nd Year Spring
BIOL	3304	Genetics		BIOL	3350	Cell Biology
CHEM	3371	Organic Chemistry I		CHEM	3372	Organic Chemistry II
CHEM	3117	Organic Chemistry I Lab		CHEM	3118	Organic Chemistry II Lab
BIOL	2441	Anatomy & Physiology I (non-BIOL majors)		BIOL	2442	Anatomy & Physiology II (non-BIOL majors)
PHYS	1307	General Physics I		PSYC	1300	
PHYS	1105	General Physics I Lab				

		3rd Year Fall				3rd Year Spring
BIOL	4310	Biochemistry				
BIOL	3370	Microbiology		Apply in July ⟶		
BIOL	3170	Microbiology Lab				
BIOL	4306	Human Anatomy with Physiology (Biology majors)		BIOL	4364	Integrated Human Physiology with Endocrinology (Biology majors)
BIOL	3106	Physiology Lab (Biology majors)		BIOL	4164	Functional Anatomy & Histology Lab (Biology majors)

Students can choose any major; however, courses offered in Biology, Chemistry, or Biochemistry majors provide the best preparation for pharmacy school. Additional recommended or required courses include **Biochemistry II**, **Economics (macro or micro)**, **Social/Behavioral Science (sociology, psychology, anthropology, etc.)**, **Public Speaking/Communication**, and **Medical Terminology**. Medical Terminology is not offered at SMU. **Review program websites or the Pre-requisite Course Summary for additional pre-requisite information.**

SMU offers two additional courses that are recommended for students pursuing pharmacy: **PSYC 4321** (Behavioral Action of Drugs) and **CHEM 5398** (Medicinal Chemistry). Review the course catalog for any pre-requisites required for each course.

Pre-calculus (MATH 1304) may be required prior to calculus (MATH 1337). Statistics can be moved to a later semester to better accommodate a student's schedule. Pre-pharmacy students may incorporate study abroad in their college plan, usually before Year 3 or during the summer. Meet with your academic or faculty advisor and plan ahead.

Students may complete PHYS 1303/1105 instead of PHYS 1307/1105. **Physics can be moved to a later semester to better accommodate a student's schedule.**

Students pursuing the B.S. in Biological Sciences are required to complete additional coursework, including Biochemistry (BIOL 5310) and Physics II (PHYS 1308) plus lab (PHYS 1106). *Note: MATH 1338 is a prerequisite (or co-requisite) for PHYS 1304.* Consult with a faculty advisor for requirements to complete the degree.

It is the student's responsibility to understand the specific requirements for individual programs. Some pharmacy programs strongly recommend or require observation/shadowing hours. Refer to individual programs for the required (or recommended) number of healthcare experiences (HCE) - including observation. Consult with individual programs for specific documentation requirements for observation hours.

Working as a pharmacy tech is excellent experience for students interested in the pharmacy profession and demonstrates interest in the profession. Many pharmacy programs also require a minimum number of community service hours.

Students apply to pharmacy school using a centralized application service, **PharmCAS,** which opens in July each year. Meet with the Pre-Health Director by the end of your 2nd year to review the application timeline.

Important Steps for Pre-Pharmacy Students
1. Compile a list of programs and review requirements
2. Review the pre-requisite course summary and individual program websites
3. Complete pre-requisite courses
4. Gain clinical experience and volunteer in the community
5. Get to know professors to request letters of recommendation
6. Apply using PharmCAS (early applications are encouraged)

Application Timeline
1. PharmCAS application opens in July (*review priority, regular/final deadlines*)
2. Request letters of recommendation
3. Submit application and supplemental material
4. Complete the Spring Academic Update, as required by programs
5. Prepare for interviews (usually October – February but some regular application deadlines may be later)

Resources
https://www.pharmcas.org/
https://www.pharmcas.org/school-directory/pharmd-directory
https://www.pharmcas.org/application-instructions/verification-and-gpas
https://www.pharmcas.org/application-instructions/before-you-apply
https://www.pharmcas.org/sites/default/files/2020-11/virtual-interviews.pdf