



Bachelor of Science in Medical Pharmacology & Toxicology

Degree Requirements: 2025-2026

NAME

ID#

Date

GENERAL EDUCATION REQUIREMENTS

Introduction to General Education

UNIV 101 1 ____

English Composition*

ENGL 101, 101A or 107..... 3 ____

ENGL 102 or 108..... 3 ____

OR

ENGL 109H 3 ____

Second Language

2nd semester proficiency..... ____

Mathematics

MATH 112 3 ____

Exploring Perspectives (4 courses)

Artist..... 3 ____

Humanist 3 ____

Social Scientist 3 ____

Natural Scientistfulfilled with CHEM 151..... 3 ____

Building Connections (3 courses)

Course #1..... 3 ____

Course #2 3 ____

Course #3 3 ____

General Education Portfolio

UNIV 301 1 ____

Minimum 32 total General Education Units Required

FOUNDATION SCIENCE COURSES

Chemistry (General & Organic, with labs)

CHEM 151 OR (161+163) 4 ____

CHEM 152 OR (162+164) 4 ____

CHEM (241A OR 242A) & 243A 3 ____ 1 ____

CHEM (241B OR 242B) & 243B..... 3 ____ 1 ____

Introductory Biology I and II, with lab

MCB 181R & 181L 3 ____ 1 ____

ECOL 182R & 182L 3 ____ 1 ____

Physiology

PSIO 380 4 ____

OR

PSIO 201 4 ____

PSIO 202 4 ____

Biochemistry

BIOC 384 or 385..... 3 ____

PHARM TOX MAJOR Requirements

Core Requirements – Complete all 3 (11 units)

PCOL 305: Scientific Writing for Health Sciences..... 3 ____

PCOL 350: Human ADME and Toxicology..... 3 ____

PCOL 406: Comprehensive Human Pharmacology..... 5 ____

Pharmacology Emphasis – Choose at least 3 (9 units)

PCOL 427: Dermatological Pharmacology..... 3 ____

PCOL 429: Neuropsychopharmacology 3 ____

PCOL 434: Pharmacology of Sex..... 3 ____

PCOL 436: Cardiovascular Pharmacology..... 3 ____

PCOL 465: Infectious Disease Pharmacology..... 3 ____

PCOL 467: Pharmacology of Anti-Cancer Drugs..... 3 ____

Toxicology Emphasis – Choose at least 2 (6 units)

PCOL 320: Toxicology of Substances Around Us..... 3 ____

PCOL 420: Environmental Toxicology..... 3 ____

PCOL 451: Forensic Toxicology..... 3 ____

Major Electives – Choose 4 (12 units)

PCOL 200: Drugs & Humanity..... 3 ____

PCOL 300: Pharmacology of Cosmetics..... 3 ____

PCOL 313: Therapeutics in Longevity & Ageing 3 ____

PCOL 445: OTC Drug Information..... 3 ____

PCOL 473: Pharmacogenomics..... 3 ____

Extra Pharmacology and Toxicology Emphasis courses

will count toward 12-unit major elective requirement

_____ 3 ____

_____ 3 ____

_____ 3 ____

_____ 3 ____

ADDITIONAL REQUIREMENTS FOR MEDICAL AND PHARMACY SCHOOL

Additional courses may be required for admission to health profession programs, including medical school, pharmacy school, PA school, dental school, etc. Requirements will vary by discipline and specific schools.

Work with your major advisor and pre-health advisor to develop a plan that includes all required courses for your future academic plans.

UNIVERSITY REQUIREMENTS:

2.00+ cumulative GPA ____ 2.00+ major GPA ____

120 total units ____ 42 upper division units ____

Bachelor of Science in Pharmaceutical Sciences

Degree Requirement Term: Fall 2025

This is a SAMPLE PLAN. Your plan may look different, depending upon your placement scores, transfer credit, and career goals. Work with your advisor to develop an individualized course plan.

SEMESTER 1		SEMESTER 2	
MATH 113: <i>Elements of Calculus</i>	3	CHEM 152: <i>General Chemistry II</i>	4
CHEM 151: <i>General Chemistry I</i>	4	ENGL 102: <i>English Composition II</i>	3
ENGL 101: <i>English Composition I</i>	3	MCB 181R +181L: <i>Introductory Biology I + lab</i>	4
Second Language – 1 st -semester level	4	Second Language – 2 nd -semester level	4
UNIV 101: <i>Intro to General Education</i>	1		15
PCOL 196D: <i>Intro to Pharmaceutical Sciences</i> ~	1		
	16		
SEMESTER 3		SEMESTER 4	
CHEM 241A+243A: <i>Organic Chemistry I + lab</i>	4	CHEM 241B+243B: <i>Organic Chemistry II + lab</i>	4
PSIO 201: <i>Human Anatomy & Physiology I</i>	4	PSIO 202: <i>Human Anatomy & Physiology II</i>	4
PCOL 200: <i>Drugs and Humanity</i>	3	PCOL Major Elective	3
General Education*	3	General Education *	3
	14	General Education *	3
			17
SEMESTER 5		SEMESTER 6	
MIC 205A + 205L: <i>General Microbiology + lab</i>	4	PHYS 110: <i>Introductory Studio Physics I</i>	4
BIOC 384: <i>Foundations in Biochemistry</i>	3	PCOL 350: <i>ADME: How the Body Changes Drugs</i>	3
PCOL 406: <i>Comprehensive Human Pharmacology</i>	5	PCOL 410: <i>Integrated Medicinal Chemistry</i>	4
PCOL 310: <i>Drug Approval: The 3 Billion Dollar Bet</i>	2	General Education*	3
	14		14
SEMESTER 7		SEMESTER 8	
PCOL 305: <i>Scientific Writing for Health Sciences</i>	3	PCOL Sub-Core Course	3
PCOL Sub-Core Course	3	PCOL Major Elective	3
PCOL Major Elective	3	General Education – Upper-Division *	3
General Education – Upper Division	3	UNIV 301: <i>General Education Portfolio</i>	1
Elective Credit or Statistics**	3	Elective Credit**	5
	15		15

Total Units Required: 120 (42 upper-division)

****ADDITIONAL COURSES MAY BE REQUIRED FOR ADMISSION TO PROFESSIONAL PROGRAMS OR TO PREPARE FOR CERTAIN CAREER PATHS, including Pharmacy, Medicine, and other health professions.**

- **PRE-PHARMACY:** Most PharmD programs require statistics. Many also require general biology II, economics, and/or public speaking. Check your programs of interest for requirements.
- **PRE-MED:** Many medical schools require statistics, general biology II, and physics II. Other schools may require additional courses; check with your programs of interest, and refer to these [Pre-Med Course Recommendations](#).
- **OTHER HEALTH PROFESSIONS:** Review these [Pre-Health Course Recommendations](#) for dental, PT, PA, and other health profession programs.
- **RESEARCH CAREERS:** Pursue undergraduate research experience to prepare for research careers. You can earn course credit for doing research.

~ PCOL 196D is recommended for all incoming first-year students, but it is not a required course.

* General education requirements include the following courses:

- UNIV 101 (Intro to General Education) and UNIV 301 (General Education Portfolio)
- FOUR *Exploring Perspectives* Gen Ed courses (Social Scientist, Humanist, Artist, and Scientist) The Scientist requirement is covered by CHEM 151.
- THREE *Building Connections* Gen Ed courses