

Bachelor of Science in Pharmaceutical Sciences

Degree Requirements: Fall 2024

NAME	ID# Date	
	Physics, with lab	
GENERAL EDUCATION REQUIREMENTS	□PHYS 102 & 1813	1
Introduction to General Education	Biochemistry	
□UNIV 101	□BIOC 384, 385, or 462A	3
English Composition*		
□ENGL 101 or 107	PHARM SCI MAJOR Requirements	
□ENGL 102 or 108		
OR	CORE REQUIREMENTS – Complete all 6	_
□ENGL 109H		
Second Language	□ PCOL 305: Scientific Writing for Health Sciences	
2 nd semester proficiency	□ PCOL 350: ADME: How the Body Changes Drugs	
	☐ PCOL 350: ADME: How the Body Changes Drugs ☐ PCOL 406: Comprehensive Human Pharmacology	
Mathematics	DCOL 410: Modisinal Chamistry	
□MATH 113, 119, 122B, or 125		4
Exploring Perspectives (4 courses)	SUB-CORE REQUIREMENTS – Choose 2	
Artist	□ PCOL 355: Drug Delivery Systems	
□Humanist	□PCOL 390: Biomarkers: Analysis of Drug Effect/Tox	
□Social Scientist	☐PCOL 473: Pharmacogenomics	
□ Natural Scientistfulfilled with CHEM 151	□ PCOL 488: Drug Hunting for Beginners	3
	MAJOR ELECTIVES – Choose at least 3	
Building Connections (3 courses)	□ PCOL 300: Pharmacology of Cosmetics	
Course #1		
Course #2	=: =: =: =: =: = = = = = = = = = = = =	
Course #3		
General Education Portfolio	☐ PCOL 430: Navana and a sharman and a shar	
□UNIV 301	□ PCOL 434: Plearness of San 16 San	
	□ PCOL 434: Pharmacology of Sex	
☐ Minimum 32 total General Education Units Required	□ PCOL 440: Pigger & Reproducibility	
BSPS FOUNDATION SCIENCE COURSES	☐ PCOL 440: Rigor & Reproducibility	
BSPS FUUNDATION SCIENCE COURSES	☐ PCOL 445: OTC Drug Information	
Chemistry (General & Organic, with labs)		_
□CHEM 151 OR (161+163) OR (141+143)	☐ PCOL 467: Pharmacology of Anti-Cancer Drugs Extra "Sub-Core" courses may count as major elective	
□CHEM 152 OR (162+164) OR (142+144)		
□CHEM (241A OR 242A) & 243A 3		
□CHEM (241B OR 242B) & 243B 3		
Inter-decision Dialogo with Joh	UNIVERSITY REQUIREMENTS:	
Introductory Biology, with lab	2.00+ cumulative GPA 2.00+ major GPA 120 total units 42 upper division units	_
	All students need some elective credit to reach unit requires	
Microbiology, with lab	MCWA complete 30+ total UA units	
□MIC 205A & 205L 3	ADDITIONAL REQUIREMENTS FOR MEDICAL AND PHARMACY S	SCHOOL
Nhialam.	Most schools require the following courses, but individual school	ols may
PSIO 380	have even more requirements. Check each school of interest for	
OR	Pre-Med students should add the following courses to their BSP PHYS 103&182 PSY 150A1 (as Soc Sci gen ed) _	-
□PSIO 201	St. 1 (1447) 252 (1905 275)	
□PSIO 202	·	
PSIO 201 + 202 option is required for PharmD admission	Statistics PSIO 201 + 202 in lieu of PSIO 380	



Bachelor of Science in Pharmaceutical Sciences

Degree Requirement Term: Fall 2024

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.

MATH 113: Elements of Calculus CHEM 151: General Chemistry 4 ENGL 102: English Composition 3 SENGL 101: English Composition 3 Second Language — 1*L-semester level	SEMESTER 1		SEMESTER 2	
ENGL 101: English Composition I Second Language — 1 ³⁴ -semester level 4 UNIV 101: Intro to General Education 1 PCOL 196D: Intro to Pharmaceutical Sciences~ 1 16 SEMESTER 3 CHEM 241A+243A: Organic Chemistry I + lab 4 PSIO 201: Human Anatomy & Physiology I 4 PCOL 200: Drugs and Humanity 3 General Education* 3 SEMESTER 5 MIC 205A + 205L: General Microbiology + lab BIOC 384: Foundations in Biochemistry PCOL 406: Comprehensive Human Pharmacology PCOL 310: Drug Approval: The 3 Billion Dollar Bet 14 SEMESTER 7 PCOL 305: Scientific Writing for Health Sciences PCOL Major Elective 3 General Education - Upper Division 3 General Education - Upper Division 3 General Education - Upper Division 5 UNIV 301: General Education Portfolio 1 Elective Credit ** SEMESTER 5 SEMESTER 8 SEMESTER 9 SEMESTER 8 SEMESTER 9 SEMESTER 8 SEMESTER 9 SEMESTER 8 SEMESTER 9 SEMES	MATH 113: Elements of Calculus	3	CHEM 152: General Chemistry II	4
Second Language — 1st-semester level UNIV 101: Intro to General Education 1 PCOL 196D: Intro to Pharmaceutical Sciences 1 16 SEMESTER 3 CHEM 241A+243A: Organic Chemistry I + lab 4 PSIO 201: Human Anatomy & Physiology I 4 PCOL 200: Drugs and Humanity 3 PCOL Major Elective 3 General Education* 3 SEMESTER 5 MIC 205A + 205L: General Microbiology + lab BIOC 384: Foundations in Biochemistry B a BIOC 380: AbmE: How the Body Changes Drugs 3 PCOL 406: Comprehensive Human Pharmacology 5 PCOL 410: Integrated Medicinal Chemistry 4 SEMESTER 7 PCOL 305: Scientific Writing for Health Sciences 7 PCOL 305: Scientific Writing for Health Sciences 3 PCOL Major Elective 3 General Education 8 SEMESTER 8 SEMESTER 8 SEMESTER 8 PCOL 305: Scientific Writing for Health Sciences 3 PCOL Major Elective 3 General Education 9 General Education 9 SEMESTER 8	CHEM 151: General Chemistry I	4	ENGL 102: English Composition II	3
UNIV 101: Intro to General Education PCOL 196D: Intro to Pharmaceutical Sciences~ 1 16 SEMESTER 3 CHEM 241A+243A: Organic Chemistry I + lab	ENGL 101: English Composition I	3	MCB 181R +181L: Introductory Biology I + lab	4
PCOL 196D: Intro to Pharmaceutical Sciences 1 16 SEMESTER 3 CHEM 241A+243A: Organic Chemistry I + lab 4 PSIO 201: Human Anatomy & Physiology I 4 PCOL 200: Drugs and Humanity 3 PCOL Major Elective 3 General Education* 3 General Education * 3 MIC 205A + 205L: General Microbiology + lab 8 BIOC 384: Foundations in Biochemistry 3 PCOL 406: Comprehensive Human Pharmacology 5 PCOL 410: Integrated Medicinal Chemistry 4 PCOL 310: Drug Approval: The 3 Billion Dollar Bet 14 SEMESTER 7 PCOL 305: Scientific Writing for Health Sciences 3 PCOL Major Elective 5 PCOL Sub-Core Course 3 PCOL Major Elective 3 PCOL Major Elective 3 PCOL Major Elective 3 PCOL Major Elective 5 PCOL Major Elective 7 PCOL Major Elective 7 PCOL Major Elective 5 PCOL Major Elective 7 PCOL Major Elective 8 PCOL Major Elective 9 PCOL Major Elec	Second Language – 1 st -semester level	4	Second Language – 2 nd -semester level	4
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General Education – Upper Division 3 UNIV 301: General Education Portfolio 1 Elective Credit or Statistics** 3 Elective Credit** 5	PCOL Major Elective	3	General Education – Upper-Division *	3
		3	UNIV 301: General Education Portfolio	1
15	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-PHARAMCY: 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