

Bachelor of Science in Pharmaceutical Sciences

Degree Requirements: Spring 2022 - Spring 2023

Sample Four-Year Plan: Version 2A

Recommended for students with math placement of MATH 113 or higher, **Pre-Med Track**

SEMESTER 1

MATH 113: <i>Elements of Calculus*</i>	3
CHEM 151: <i>General Chemistry*</i>	4
ENGL 101: <i>English Composition I*</i>	3
Second Language – 1 st -semester level	4
PCOL 196D: <i>Intro to Pharmaceutical Sciences ~</i>	1
UNIV 101 – Intro to General Education **	1
	16

SEMESTER 2

CHEM 152: <i>General Chemistry II*</i>	4
ENGL 102: <i>English Composition II*</i>	3
Second Language – 2 nd -semester level	4
MCB 181R +181L: <i>Introductory Biology I + lab*</i>	4
	15

SEMESTER 3

CHEM 241A+243A: <i>Organic Chemistry I + lab*</i>	4
PSIO 201: <i>Human Anatomy & Physiology I*</i>	4
PCOL 310: <i>Drug Approval - The 3 Billion Dollar Bet</i>	2
MATH 263: <i>Intro to Statistics and Biostatistics***</i>	3
General Education **	3
	16

SEMESTER 4

CHEM 241B+243B: <i>Organic Chemistry II + lab*</i>	4
PSIO 202: <i>Human Anatomy & Physiology II</i>	4
PCOL 440: <i>Rigor & Reproducibility</i>	2
PSY 150A1: <i>Structure of Mind & Behavior***</i>	3
General Education **	3
	16

SEMESTER 5

PHYS 102+181: <i>Introductory Physics I + lab</i>	4
BIOC 384: <i>Foundations in Biochemistry</i>	3
MIC 205A+205L: <i>General Microbiology + lab</i>	4
PCOL 406: <i>Comprehensive Human Pharmacology</i>	5
	16

SEMESTER 6

PHYS 103+182: <i>Introductory Physics II + lab***</i>	4
PCOL 350: <i>ADME: How the Body Changes Drugs</i>	3
PCOL 410: <i>Integrated Medicinal Chemistry</i>	5
General Education **	3
	15

SEMESTER 7

PCOL 355: <i>Drug Delivery Systems</i>	3
PCOL 390: <i>Biomarkers: Analysis of Drug Effect/Toxicity</i>	3
PCOL 305: <i>Scientific Writing for Health Sciences</i>	3
ECOL 182R+182L: <i>Introductory Biology II + lab***</i>	4
General Education **	3
	16

SEMESTER 8

PHCL 460: <i>Designing Drugs: From Chemistry to Cure</i>	3
PCOL 473: <i>Pharmacogenomics</i>	3
General Education **	3
General Education (upper-division) **	3
Upper-Division MCB course ***	3
UNIV 301: <i>General Education Portfolio **</i>	1
	16

Total Units Required: 120 (42 upper-division)

- This is a sample plan. Your placement scores, transfer and exam credit, and other personal factors may impact your course sequencing. Official degree requirements can be found in the UA Academic Catalog.
- ~ PCOL 196D is recommended for all incoming first-year students, but it is not a required course.
- * Certain science, math, and English courses must be completed with a minimum C average in order to gain Advanced Standing in the Pharmaceutical Sciences major. Other requirements will apply. Advanced Standing is required in order to access PCOL and PHCL courses in the 6th through 8th semester.
- ** 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)
 - THREE *Building Connections* Gen Ed courses
- ***Most med schools require psychology, biostatistics, 2 semesters of physiology + lab, 2 semesters of physics + lab, and introductory biology II. UA -Tucson College of Medicine requires an upper-division MCB course. Individual med schools may have other unique admission requirements; check your schools of interest and incorporate any additional course requirements into your plan.