

Bachelor of Science in Pharmaceutical Sciences

Degree Requirements: Spring 2022 through Spring 2023

Sample Four-Year Plan: Version 1A

Recommended for students with math placement of MATH 113 or higher

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
Total	15

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
General Education**	3
UNIV 101: <i>Intro to General Education**</i>	1
Total	15

SEMESTER 3

CHEM 241A+243A: <i>Organic Chemistry I + lab*</i>	4
MCB 181R +181L: <i>Introductory Biology I + lab*</i>	4
PCOL 310: <i>Drug Approval – The 3 Billion Dollar Bet</i>	2
General Education**	3
Total	13

SEMESTER 4

CHEM 241B+243B: <i>Organic Chemistry II + lab*</i>	4
PSIO 380: <i>Fundamentals of Human Physiology*</i>	4
PCOL 440: <i>Rigor & Reproducibility</i>	2
General Education**	3
General Education**	3
Total	16

SEMESTER 5

MIC 205A + 205L: <i>General Microbiology + lab</i>	4
BIOC 384: <i>Foundations in Biochemistry</i>	3
PCOL 305: <i>Scientific Writing for Health Sciences</i>	3
PCOL 406: <i>Comprehensive Human Pharmacology</i>	5
Total	15

SEMESTER 6

PHYS 102 + 181: <i>Introductory Physics I + 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
Total	15

SEMESTER 7

PCOL 355: <i>Drug Delivery Systems</i>	3
PCOL 390: <i>Biomarkers: Analysis of Drug Effect/Toxicity</i>	3
General Education**	3
General Education**	3
Upper-Division Elective, Research, or Thesis	3
Total	15

SEMESTER 8

PHCL 460: <i>Designing Drugs: From Chemistry to Cure</i>	3
PCOL 473: <i>Pharmacogenomics</i>	3
Upper-Division Elective, Research, or Thesis	3
Elective	6
UNIV 301 – <i>General Education Portfolio**</i>	1
Total	16

Total Units Required: 120 (42 upper-division)

Notes:

- This is a sample plan. Your placement scores, transfer and exam credit, and other personal factors may impact your course sequencing. Other sample plans are available for pre-med and pre-PharmD students. (Additional courses are required for admission to those professional programs.) 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

Note: Students should work with an advisor to select elective courses that will support whatever professional pathway or advanced degree they are considering.