Bachelor of Science in Pharmaceutical Sciences
Degree Requirements: Fall 2023

**GENERAL EDUCATION REQUIREMENTS**

Introduction to General Education
- ☐ UNIV 101 ................................................................. 1

English Composition*
- ☐ ENGL 101 or 107 ................................................ 3
- ☐ ENGL 102 or 108 ................................................ 3
  OR
- ☐ ENGL 109H ............................................................. 3

Second Language
- ☐ 2nd semester proficiency ......................................

Mathematics
- ☐ MATH 113, 119, 122B, or 125 ........................... 3

Exploring Perspectives (4 courses)
- ☐ Artist ................................................................. 3
- ☐ Humanist .............................................................. 3
- ☐ Social Scientist ..................................................... 3
- ☐ Natural Scientist .................................. fulfilled 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

**BSPS FOUNDATION SCIENCE COURSES**

Chemistry (General & Organic, with labs)
- ☐ CHEM 151 OR (161+163) OR (141+143) .................. 4
- ☐ CHEM 152 OR (162+164) OR (142+144) .................. 4
- ☐ CHEM (241A OR 242A) & 243A .......................... 3 1
- ☐ CHEM (241B OR 242B) & 243B ......................... 3 1

Introductory Biology, with lab
- ☐ MCB 181R & 181L ........................................... 3 1

Microbiology, with lab
- ☐ MIC 205A & 205L ........................................... 3 1

Physiology
- ☐ PSIO 380 .......................................................... 4
  OR
- ☐ PSIO 201 .......................................................... 4
- ☐ PSIO 202 .......................................................... 4
  PSIO 201 + 202 option is required for PharmD admission

**PHARM SCI MAJOR REQUIREMENTS**

**CORE REQUIREMENTS – Complete all 7 (23 units)**
- ☐ PCOL 200: Drugs & Humanity ................................ 3
- ☐ PCOL 305: Scientific Writing for Health Sciences...... 3
- ☐ PCOL 310: Drug Approval: The 3 Billion Dollar Bet.... 2
- ☐ PCOL 350: ADME: How the Body Changes Drugs...... 3
- ☐ PCOL 406: Comprehensive Human Pharmacology.... 5
- ☐ PCOL 410: Integrated Medicinal Chemistry ......... 5
- ☐ PCOL 440: Rigor & Reproducibility ..................... 2

**SUB-CORE REQUIREMENTS – Choose 2 (6 units)**
- ☐ PCOL 355: Drug Delivery Systems ...................... 3
- ☐ PCOL 390: Biomarkers: Analysis of Drug Effect/Tox.. 3
- ☐ PCOL 473: Pharmacogenomics .......................... 3
- ☐ PCOL 488: Drug Hunting for Beginners ............... 3

**MAJOR ELECTIVES – Choose 2 (6 units)**
- ☐ PCOL 300: Pharmacology of Cosmetics ............... 3
- ☐ PCOL 320: Toxicology ......................................... 3
- ☐ PCOL 405: Pharmaceutical Science Techniques ...... 3
- ☐ PCOL 418: Medicinal Chem of Natural Products... 3
- ☐ PCOL 434: Pharmacology of Sex ................................ 3
- ☐ PCOL 445: OTC Drug Information .................... 3
- ☐ PCOL 465: Infectious Disease Pharmacology ....... 3
- ☐ PCOL 467: Pharmacology of Anti-Cancer Drugs .... 3
  Extra “Sub-Core” courses may count as major electives
  ____________________ 3
  ____________________ 3

**UNIVERSITY REQUIREMENTS:**

- 2.00+ cumulative GPA  ____ 2.00+ major GPA ____
- 120 total units* ____ 42 upper division units* ____
- *All students need elective credit to reach unit requirements
- MCWA complete ___
- 30+ total UA units ___

**ADDITIONAL REQUIREMENTS FOR MEDICAL AND PHARMACY SCHOOL**

Most schools require the following courses, but individual schools may have even more requirements. Check each school of interest for details.

Pre-Med students should add the following courses to their BSPS plan:
- PHYS 103&182
- PSY 150A (as Soc Sci gen ed)
- Stats (MATH 263)
- Biology II (ECOL 182R+182L)

UA Pre-PharmD students must add the following courses to the BSPS plan:
- Statistics
- PSIO 201 + 202 in lieu of PSIO 380

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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.

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<tr>
<th>SEMESTER 1</th>
<th>SEMESTER 2</th>
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<tbody>
<tr>
<td>MATH 113: Elements of Calculus</td>
<td>CHEM 152: General Chemistry II</td>
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<tr>
<td>CHEM 151: General Chemistry I</td>
<td>ENGL 102: English Composition II</td>
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<td>ENGL 101: English Composition I</td>
<td>MCB 181R +181L: Introductory Biology I + lab</td>
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<td>Second Language – 1st-semester level</td>
<td>Second Language – 2nd-semester level</td>
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<tr>
<td>UNIV 101: Intro to General Education</td>
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<tr>
<td>PCOL 196D: Intro to Pharmaceutical Sciences~</td>
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<tr>
<th>SEMESTER 3</th>
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<tr>
<td>PSIO 201: Human Anatomy &amp; Physiology I</td>
<td>PSIO 202: Human Anatomy &amp; Physiology II</td>
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<td>PCOL 200: Drugs and Humanity</td>
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<th>SEMESTER 5</th>
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<tr>
<td>MIC 205A + 205L: General Microbiology + lab</td>
<td>PHYS 102+181: Introductory Physics I + lab</td>
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<th>SEMESTER 7</th>
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<td>PCOL 305: Scientific Writing for Health Sciences</td>
<td>PCOL Sub-Core Course</td>
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<td>PCOL Major Elective</td>
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<td>General Education – Upper-Division*</td>
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<td>General Education – Upper Division</td>
<td>UNIV 301: General Education Portfolio</td>
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<td>Elective Credit or Statistics**</td>
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**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

Total Units Required: 120 (42 upper-division)

Updated 7/20/23