

# Pre-PharmD Sample Program

	Fall	Winter	Spring	Requirements
Year 1	<ul style="list-style-type: none"> <li><b>BIO SCI 93 (4)</b></li> <li><b>CHEM 1A (4)</b></li> <li><b>PHRMSCI 1 (1, P/NP)</b></li> <li>GE (4)</li> </ul>	<ul style="list-style-type: none"> <li><b>BIO SCI 94 (4)</b></li> <li><b>CHEM 1B (4)</b></li> <li>WRITING 39A/B/C (4)</li> </ul>	<ul style="list-style-type: none"> <li><b>CHEM 1C/1LC (7)</b></li> <li>MATH 2A (4)</li> <li>Writing 39A/B/C (4)</li> <li>GE</li> </ul>	<ul style="list-style-type: none"> <li>Math 1B only offered Fall, Winter, Summer</li> <li>WR 39A must be completed before Fall 2nd year</li> </ul>
Year 2	<ul style="list-style-type: none"> <li><b>BIO SCI 97 (4)</b></li> <li><b>CHEM 51A/1LD (7)</b></li> <li>MATH 2B (4)</li> <li>GE</li> </ul>	<ul style="list-style-type: none"> <li><b>BIO SCI 98 (4)</b></li> <li><b>CHEM 51B/51LB (7)</b></li> <li>PHRMSCI 42 (2)</li> <li>GE</li> </ul>	<ul style="list-style-type: none"> <li><b>BIO SCI 99 (4)</b></li> <li><b>CHEM 51C/51LC (7)</b></li> <li>GE</li> <li>GE</li> </ul>	<ul style="list-style-type: none"> <li>WR 39C must be completed before Fall 3rd year</li> <li>Math 2A is a co-req for Physics 3A</li> <li>Study Abroad (optional)</li> </ul>
Year 3	<ul style="list-style-type: none"> <li><b>PHRMSCI 120, 120L (7)</b></li> <li>PHYSICS 3A (4)</li> <li>BIO SCI 100 (3,P/NP)</li> <li>CHEM 51LD (3)</li> </ul>	<ul style="list-style-type: none"> <li><b>PHRMSCI 170A (4)</b></li> <li>PHYSICS 3B (4)</li> <li>STATS 7, 8 or MATH 2D, 3A (4)</li> </ul>	<ul style="list-style-type: none"> <li><b>PHRMSCI 170B (4)</b></li> <li>PHYSICS 3C (4)</li> <li>PHRMSCI 76 (2)</li> <li>GE</li> </ul>	<ul style="list-style-type: none"> <li>Bio 100 &amp; Physics 3C must be completed before Fall of 4th year</li> <li>Study Abroad (optional)</li> </ul>
Year 4	<ul style="list-style-type: none"> <li><b>PHRMSCI 171 (4)</b></li> <li><b>PHRMSCI 172 (2,P/NP)</b></li> <li><b>PHRMSCI 174, 174L (7)</b></li> <li>GE</li> </ul>	<ul style="list-style-type: none"> <li><b>PHRMSCI 177, 177L (7)</b></li> <li>UD Elective</li> <li>GE</li> <li>GE</li> </ul>	<ul style="list-style-type: none"> <li>PHRMSCI 173 (4)</li> <li>UD Elective</li> <li>GE</li> </ul>	<ul style="list-style-type: none"> <li>180 minimum units needed to graduate</li> <li>Graduation application on StudentAccess due Week 2 of intended graduating quarter</li> </ul>

\***Bolded courses MUST be taken in the indicated quarter/year**

\* **PharmD courses (can be taken at any time as long as prerequisites are met)**

## Upper Division Electives (8 units to graduate)

### Biological Sciences

- **D103 Cellular Biology**
- D104 Developmental Biology
- D111L Developmental and Cell Biology Lab\*
- **D136 Human Anatomy (summer only, no lab)**
- D145 Genomics and Proteomics
- D148 Development and Disease2
- **D170 Applied Human Anatomy (includes lab)**
- E136 The Physiology of Human Nutrition
- E139 Animal Locomotion
- E142 Writing/Philosophy of Biology
- M114 Advanced Biochemistry
- M114L Biochemistry Laboratory\*
- M116L Molecular Biology Laboratory\*
- **M118L Experimental Microbiology Laboratory\***
- M121 Immunology with Hematology
- **M122 General Microbiology**
- M123 Introduction to Computational Biology
- M124A Virology
- M124B Viral Pathogenesis and Immunity
- M124L Virus Engineering Laboratory\*
- M125 Molecular Biology of Cancer
- M137 Microbial Genetics
- M143 Human Parasitology
- M144 Cell Organelles and Membranes
- N110 Neurobiology
- N113L Neurobiology Laboratory\*
- N153 Neuropharmacology
- N154 Molecular Neurobiology

### Pre-PharmD Recommended Courses

- **Anthro 2A (GE III and VIII) - 4 units**
- **Psych 7A (GE III) - 4 units**
- **Sociol 1 (GE III and VII) - 4 units**
- **Econ 20A (GE III) - 4 units**
- **Stats 7 (Math requirement) - 4 units**
- **PharmSci 90 - 4 units**
- **Physics 3LB & 3LC - 1.5 units each**
- **Research 199 - optional**

### Physical Sciences

- 107 Inorganic Chemistry I
- 107L Inorganic Chemistry Laboratory
- 125 Advanced Organic Chemistry
- 128 Introduction to Chemical Biology
- 128L Introduction to Chemical Biology Lab Techniques
- 138 Introduction to Computational Organic Chemistry
- 156 Advanced Lab in Chemistry and Synthesis of Materials
- 160 Organic Synthesis Laboratory

### Public Health

- 121 Introduction to Complementary and Alternative Medicine
- 135 Medical Sociology
- 147 Drug Abuse Prevention

### Pharmaceutical Sciences

- 155 Neuropsychopharm
- 163 Pharmacogenomics and Epigenetics
- 175 Drug Discovery Computing Techniques
- 179 Emerging Technologies in Pharmaceutical Sciences and Medicine

\*3 UCLC Health and Safety modules are prerequisites for Upper Division Bio Labs and Bio Research (197,198, 199)