PHARMACEUTICAL SCIENCES, B.S.

The B.S. in Pharmaceutical Sciences is a major designed for students who intend to pursue the Doctor of Pharmacy (Pharm.D.) at the USC College of Pharmacy. Students must be accepted into the Pharm.D. program at the USC College of Pharmacy their junior or senior year to meet the requirements for the B.S. in Pharmaceutical Sciences.

The B.S. in Pharmaceutical Sciences is awarded at the end of the spring semester of the second year in the Pharm.D. program.

Click here (http://sc.edu/study/colleges_schools/pharmacy/application_process/pharm_d_applicants/admission_requirements/) for admissions requirements for the Doctor of Pharmacy (Pharm.D.) program.

The sequencing of the required math and science courses is particularly important for ensuring that all prerequisites can be completed before entering the Pharm.D. program.

Learning Outcomes

1. Develop, integrate, and apply knowledge from the foundational sciences (i.e., pharmaceutical, social/behavioral/administrative, and clinical sciences) to evaluate the scientific literature, explain drug action, solve therapeutic problems, and advance population health and patient-centered care.
2. Educate all audiences by determining the most effective and enduring ways to impart information and assess understanding.
3. Assure that patients’ best interests are represented.
4. Actively participate and engage as a healthcare team member by demonstrating mutual respect, understanding, and values to meet patient care needs.
5. Effectively communicate verbally and nonverbally when interacting with an individual, group, or organization.
6. Examine and reflect on personal knowledge, skills, abilities, beliefs, biases, motivation, and emotions that could enhance or limit personal and professional growth.
7. Exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society.

Admissions

In addition to the general requirements for admission to the University, all students admitted to the Pre-Pharmacy and/or professional pharmacy program must meet the following specialized requirements of the College of Pharmacy:

Pre-Pharmacy

Any entering freshman student who wishes to pursue a pharmacy degree and who fulfills general requirements for admission to the University will be accepted into the pharmaceutical sciences (pre-pharmacy) program of study. Pre-pharmacy students within the University will be advised by pre-pharmacy advisors.

Grade Requirement

All courses in the pre-pharmacy curriculum must be passed with a grade of C or better.

Academic Standing

All pre-pharmacy students are subject to the same regulations regarding scholastic deficiency and academic suspension as defined for undergraduate students by the University.

Other Regulations

Any student seeking an exception to the academic standards may petition the College of Pharmacy; a petition may be approved or denied based on the merits of the individual situation. Information on procedures may be obtained from the Office of the Dean.

Transfer Admission (Pre-Pharmacy)

1. Students enrolled in other colleges on the Columbia campus must have a minimum cumulative GPA of 3.00 and must have at least 12 USC credit hours.
2. Students from other USC campuses must have a cumulative GPA of 3.00 and must have taken at least 12 USC credit hours. Additionally, students from other USC campuses who have fewer than 30 semester hours must also meet Columbia campus freshman admission requirements.
3. Transfer students from other accredited institutions must present a minimum cumulative GPA of 3.00 on all college work taken. Students who have fewer than 30 semester hours of college work must also meet Columbia campus freshman admission requirements.

Degree Requirements (minimum 128 hours)

The Pre-Pharmacy work must total at least 66 hours.

Program of Study

*all degree requirements must be passed with a grade of C or higher*

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Carolina Core</td>
<td>32-44</td>
</tr>
<tr>
<td>2. College Requirements</td>
<td>0</td>
</tr>
<tr>
<td>3. Program Requirements</td>
<td>31-34</td>
</tr>
<tr>
<td>4. Major Requirements</td>
<td>62</td>
</tr>
</tbody>
</table>

Founding Documents Requirement

All undergraduate students must take a 3-credit course or its equivalent with a passing grade in the subject areas of History, Political Science, or African American Studies that covers the founding documents including the United States Constitution, the Declaration of Independence, the Emancipation Proclamation and one or more documents that are foundational to the African American Freedom struggle, and a minimum of five essays from the Federalist papers. This course may count as a requirement in any part of the program of study including the Carolina Core, the major, minor, or cognate, or as a general elective. Courses that meet this requirement are listed here (https://academicbulletins.sc.edu/undergraduate/founding-document-courses/).

1. Carolina Core Requirements (32-44 hours)

CMW – Effective, Engaged, and Persuasive Communication: Written (6 hours)

- ENGL 101
- ENGL 102
ARP – Analytical Reasoning and Problem Solving (6-7 hours)
- MATH 122 or MATH 141
- STAT 201 or STAT 205 or STAT 206

SCI – Scientific Literacy (7 hours)
- BIOL 101 & BIOL 101L
- CHEM 111

GFL – Global Citizenship and Multicultural Understanding: Foreign Language (0-6 hours)
Demonstrate proficiency in a foreign language by achieving a score of two or higher on the foreign language placement test. Students who do not score at least a two must either take 109/110 sequence of SPAN, FREN, GER or LATN or ARAB, CHIN, GREK, ITAL, JAPA, PORT, or RUSS 121. If both 109 and 110 are required, foreign language sequences typically begin in the Fall semesters. (American Sign Language does not count toward the foreign language requirement).
- CC-GFL courses [link]

GHS – Global Citizenship and Multicultural Understanding: Historical Thinking (3 hours)
- any CC-GHS course [link]

GSS – Global Citizenship and Multicultural Understanding: Social Sciences (3 hours)
- PSYC 101

AIU – Aesthetic and Interpretive Understanding (3 hours)
- any CC-AIU course [link]

CMS – Effective, Engaged, and Persuasive Communication: Spoken Component 1 (0-3 hours)
- any CC-CMS course [link]

INF – Information Literacy 1 (0-3 hours)
- any overlay or stand-alone CC-INF course [link]

VSR – Values, Ethics, and Social Responsibility 1 (0-3 hours)
- any overlay or stand-alone CC-VSR course [link]

1 Carolina Core Stand Alone or Overlay Eligible Requirements — Overlay-approved courses offer students the option of meeting two Carolina Core components in a single course. A maximum of two overlays is allowed. The total Carolina Core credit hours must add up to a minimum of 31 hours. Some programs may have a higher number of minimum Carolina Core hours due to specified requirements.

2. College Requirements (0 hours)
No college-required courses for this program.

3. Program Requirements (31-34 hours)

Supporting Courses (31 hours)

<table>
<thead>
<tr>
<th>Additional Pre-Pharmacy Requirements</th>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 102 &amp; 102L</td>
<td>Biological Principles II Laboratory</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 243</td>
<td>Human Anatomy and Physiology I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 244</td>
<td>Human Anatomy and Physiology II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 250</td>
<td>Microbiology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHEM 111L</td>
<td>General Chemistry I Lab</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>&amp; 112L</td>
<td>and General Chemistry II Lab</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 331L</td>
<td>Essentials of Organic Chemistry Laboratory I</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CHEM 332L</td>
<td>Essentials of Organic Chemistry Laboratory II</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CHEM 333</td>
<td>Organic Chemistry I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHEM 334</td>
<td>Organic Chemistry II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHYS 201</td>
<td>General Physics I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON 224</td>
<td>Introduction to Economics</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours 32

Note: Students may substitute ECON 224 with ECON 221 or ECON 222.

Electives (0-3 hours)
An elective course will be needed if the Pre-Pharmacy hours total is less than 66.

4. Major Requirements (62 hours)
Professional Requirements
The final 62 credit hours required for the BS in Pharmaceutical Sciences degree are earned after admission to the USC College of Pharmacy and during the first two years of the professional Doctor of Pharmacy (PharmD) program.

Major Map
A major map is a layout of required courses in a given program of study, including critical courses and suggested course sequences to ensure a clear path to graduation.

Major maps are only a suggested or recommended sequence of courses required in a program of study. Please contact your academic advisor for assistance in the application of specific coursework to a program of study and course selection and planning for upcoming semesters.

Pharmaceutical Sciences, B.S.