As a profession, pharmacy exists to serve the needs of society, most often represented as the needs of individual patients. Pharmacists are the health professionals who serve patients and other health professionals in assuring appropriate use of, and optimal therapeutic outcomes from, medications. Pharmacy’s ultimate goal is to render pharmaceutical care.

Some pharmacy schools will accept students upon the completion of a minimum of 60 semester units of pre-pharmacy coursework. However, due to a high number of applications, a bachelor’s degree is highly preferred at many institutions. A Pharm.D. (Doctor of Pharmacy) degree requires at least four years of professional study. The first two years usually cover the basic sciences and the last two years, pharmacy theory and practice. Upon graduation, increasing numbers of students are seeking residency training in institutional and community pharmacy practice. These residency programs may be in pharmacy practice or specialty areas, depending upon personal interests and specific career requirements. Completion of a pharmacy residency is oftentimes a requirement for employment in hospital pharmacy practice or clinical faculty positions. In addition, some pharmacy schools offer joint degrees: PharmD/PhD, PharmD/MBA, and PharmD/MS.

### COMMON PRE-PHARMACY PREREQUISITE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirement</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>One year of coursework with lab</td>
<td>BISC 120Lg &amp; BISC 220Lg OR CHEM 105Lg &amp; CHEM 105Lg OR CHEM 115Lg &amp; CHEM 115Lg</td>
</tr>
<tr>
<td>Chemistry</td>
<td>One year of coursework with lab</td>
<td>CHEM 322Lg &amp; CHEM 322L OR CHEM 325Lg</td>
</tr>
<tr>
<td>Organic Chemistry</td>
<td>One year of coursework with lab</td>
<td>CHEM 105Lg &amp; CHEM 105Lg OR CHEM 115Lg &amp; CHEM 115Lg</td>
</tr>
<tr>
<td>Physics</td>
<td>One year of coursework with lab. Some schools only require one semester. Some Pharmacy schools prefer calculus-based physics – mechanics &amp; thermodynamics.</td>
<td>PHYS 135Lg &amp; PHYS 135L OR PHYS 151L &amp; PHYS 152L</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Some Pharmacy schools will accept one semester of Calculus while others require one course in Statistics, as well.</td>
<td>MATH 125g and/or MATH 208g or PSYCH 274g, or HP 340, or BISC 305</td>
</tr>
<tr>
<td>Molecular Bio &amp; Biochemistry</td>
<td>One semester is strongly recommended yet required by other Pharmacy schools</td>
<td>BISC 320Lg &amp; BISC 330L</td>
</tr>
<tr>
<td>Anatomy</td>
<td>One semester is strongly recommended yet required by other Pharmacy schools</td>
<td>HBIO 301L</td>
</tr>
<tr>
<td>Microbiology &amp; Physiology</td>
<td>One semester is strongly recommended yet required by other Pharmacy schools</td>
<td>BISC 300L &amp; BISC 307L</td>
</tr>
<tr>
<td>English</td>
<td>One year is required for most Pharmacy schools in the country.</td>
<td>WRIT 150 and WRIT 340</td>
</tr>
<tr>
<td>Humanities/Soc. Science</td>
<td>Many Pharmacy schools strongly recommend a course in Psychology, Speech Communication, Public Speaking and/or Economics. Note: Pharmacy requirements vary from school to school.</td>
<td>Contact individual schools for specific requirements.</td>
</tr>
</tbody>
</table>

### DISCIPLINES OF PHARMACY

- **Pharmaceutics**: The discipline of pharmacy dealing with all aspects of the process of turning a new chemical entity (NCE) into a medication able to be carefully and successfully used by patients in the society. Pharmaceutics is the science of dosage form design.

- **Medicinal Chemistry and Pharmacognosy**: Scientific discipline at the intersection of chemistry and pharmacy concerned with designing and developing pharmaceutical drugs.

- **Pharmacy Practice**: The discipline of pharmacy that implies developing the professional roles of pharmacists. For example:
  - Health psychology
  - Preventing drug abuse
  - Disease state management

- **Pharmacology**: The discipline that consists of understanding the action of drugs in the body. Attention is given to the effects of diverse doses of each medicinal substance and to the diverse methods in which medicine can be introduced into the body.
Pharmacy School Selection Criteria

⇒ **GPA** is important in terms of overall college grades or pre-pharmacy coursework grades, depending on the school. Admissions committees look for trends in academic ability. Indication of improvement in your last two years of college work is highly noted. To be a competitive pharmacy applicant, it is best to maintain your overall GPA to above a 3.5.

⇒ For the 2013 entering class, the average **undergraduate science GPA** was a 3.45. Most pharmacy schools prefer that **prerequisites** be taken at a university versus a community college.

⇒ Approximately three-fourths of all pharmacy schools require or recommend the **Pharmacy College Admissions Test (PCAT)**. Check with the pharmacy schools you plan to apply to for information.

⇒ Many pharmacy schools require 1-4 **letters of recommendation** as a factor of the pharmacy admissions process. Schools may need you to submit letters from particular evaluators, such as a pharmacist, professor, or university advisor. If letters are essential, choose recommenders who know you well and can talk to your maturity, dependability, dedication, compassion, communication-skills, leadership, and some related experience in the field.

⇒ Pharmacy schools expect applicants to have experience in **community service** and **leadership skills**. Evidence of community service demonstrates your interest in serving and helping people, your willingness to learn from others, and your development of interpersonal communication skills. Pharmacy schools select students who will become leaders in the profession.

⇒ Admissions committees expect that you have **knowledge of the pharmacy profession** and that you know some of the issues pharmacists currently face. Additionally, the admissions committee will want to know specifically why you are pursuing a career in the pharmacy profession.

⇒ **Pharmacy experience** gained through volunteering, interning, or taking a summer job in a pharmacy or health care setting.

RESOURCES

- American Association of Colleges of Pharmacy [www.aacp.org](http://www.aacp.org)
- Centralized Application Service for Colleges and Schools of Pharmacy [www.pharmcas.org](http://www.pharmcas.org)
- American Council of Pharmaceutical Education [www.aspe-accredit.org](http://www.aspe-accredit.org)
- American Pharmacists Association [www.pharmacist.com](http://www.pharmacist.com)
- Pharmacy Choice [www.pharmacychoice.com](http://www.pharmacychoice.com)
- Pharmacy College Admission Test (PCAT) [www.pcatweb.info](http://www.pcatweb.info)
- Pharmacy School Admission Requirements [http://www.aacp.org/resources/student/pharmacyforyou/admissions/Pages/PSAR.aspx](http://www.aacp.org/resources/student/pharmacyforyou/admissions/Pages/PSAR.aspx)
- USC Pre-Pharmacy Society [http://www-scf.usc.edu/~prepharm/index.php](http://www-scf.usc.edu/~prepharm/index.php)
- USC TAP Program [http://pharmaceuticalschool.usc.edu/programs/pre/tap/](http://pharmaceuticalschool.usc.edu/programs/pre/tap/)

The Trojan Admission Pre-Pharmacy (TAP) program provides talented USC undergraduates with priority admission to the School of Pharmacy's four-year Doctor of Pharmacy (Pharm.D.) program.

This information is not comprehensive and should not be used as your only advising tool. Research each school for a complete listing of requirements.