

Pre-Pharmacy Requirements

Introduction: This information is based on the general requirements of most (>50%) pharmacy schools across the nation. It will be up to each student to research schools of interest and to finalize any remaining requirements.

- It is strongly advised that students take every course tested on the PCAT (marked with *).
- **Many pharmacy schools do not require students to complete a bachelor's degree.** If you are applying to any of these schools, you may adjust your classes to fit into 2 or 3 years.
- Each student should develop a plan based on: necessary pharmacy school requirements and, should they choose to earn a BS/BA, the requirements for their undergrad degree.
- A draft of this academic plan needs to be reviewed with the student's advisor from their major.

Required by MOST Pharmacy Schools

Chemistry: 2 Semesters

*General Chemistry I: CHEM 1031 + CHEM 1033
*General Chemistry II: CHEM 1032 + CHEM 1034

Organic Chemistry: 2 Semesters

*Organic Chemistry I: CHEM 2201 + CHEM 2203
Organic Chemistry II: CHEM 2202 + CHEM 2204

English: 2 Semesters

Analytical Reading & Writing: ENG 0802
Intellectual Heritage I: IH 0851
Intellectual Heritage II: IH 0852

Anatomy & Physiology: 2 Semesters

Check schools of interest on whether a lab is required
*KINS 1223 (or 1221 or BIO 2233)
KINS 1224 (or 1222 or BIO 3334)

Public Speaking: 1 Semester

Public Speaking: CSI 1111

Biology: 3 Semesters

*Intro. to Organismal Biology: BIOL 1111
*Intro. to Cellular & Molecular Bio.: BIOL 2112
*Microbiology: BIOL 2001 (or BIOL 3317)

Math: 2 Semesters

Calculus I: MATH 1041
Statistics: MATH 1013, MATH 1044, PSY 1003, SOC 1167, BIOL 5312

Economics: 1 Semester

Check schools of interest to determine if micro or macro is preferred
Macroeconomic Principles: ECON 1101
Microeconomic Principles: ECON 1102

Physics: 1 Semester

Physics requirement dictated by major. Content covered in Physics 2021 / 2022 is recommended.
Physics I: PHYS 2021 (or 1061 or 1021)

Required by SOME Pharmacy Schools

Physics: Additional 1 Semester

Physics II: PHYS 2022 (or 1062 or 1022)

Psychology: 1 Semester

Introduction to Psychology: PSY 1001

**Tested on the PCAT*

Additional Electives:

Refer to schools of interest for exact requirements. Areas may include:

Humanities: History, Literature, Philosophy, Religion, Languages

Sample 4+4 Timeline (2+4 and 3+4 timelines will differ)

	Fall Semester	Spring Semester	Summer
Year 1	Chemistry I Calculus I	Chemistry II Biology I Statistics	<i>Exposure to Healthcare</i> <i>Community Service</i> <i>PCAT prep if necessary</i> <i>If 2+4 submit PharmCAS July – Jan.</i>
Year 2	Organic Chemistry I Biology II <i>If 2+4 PCAT October – Jan.</i>	Organic Chemistry II Economics	<i>Continue Volunteering</i> <i>If 3+4 PCAT July – January</i> <i>If 3+4 submit PharmCAS July – Jan.</i>
Year 3	Physics I Anatomy & Physiology I Microbiology	Anatomy & Physiology II Public Speaking	<i>If 4+4 PCAT by July - January</i> <i>If 3+4 submit PharmCAS July – Jan.</i>
Year 4	Any Additional Requirements <i>Pharmacy school Interviews</i>	Any Additional Requirements <i>Pharmacy school Interviews</i>	<i>Take a break before pharm school!</i>

This timeline is an example of how you may wish to take courses *in a perfect world*. Timing of these courses may change due to placement exams or major requirements. **Many pharmacy schools do not require students to complete a bachelor's degree.** We still, however, highly recommend students consider earning their bachelor's degree as this can make you more competitive and secure other options should you no longer be interested in pharmacy. Develop an academic plan based on the sequence above that is tailored to your needs so that you and your advisor can discuss your plan.

Visit Temple's bulletin to view the availability and prerequisites of each course: www.temple.edu/courses
If you are interested in Temple University's School of Pharmacy, their pre-requisites are located here: <https://pharmacy.temple.edu/academics/pharmd/prerequisites-pharmd>

ePortfolio

ePortfolio is a tool that will help students stay organized for a professional school application. Through the ePortfolio process, students will set up a 'mock application' that includes GPAs and professional development experiences. **ePortfolio drafts are due to PPHS June 30th two years before students plan to enter professional school.** 2+4 students should submit their ePortfolio draft immediately following their freshman year.

The circle to the right represents four areas that are important for admission to professional school. As you embark on your journey to pharmacy school, think about ways to enhance each of these four sections.



Applying to Pharmacy Schools

Application Process: A centralized application service is available through the Pharmacy College Application Service (PharmCAS) which is administered by the American Association of Colleges of Pharmacy (AACP). Applications are submitted one year before students expect to enter pharmacy school and are available for submission in early July. Schools view applicants on a rolling basis – apply early when the application opens!

Undergraduate Major: There is no preferred major for pharmacy school and many schools may not even require that students earn an undergraduate degree. Students will be required to select a major at the very least as a backup option. We, however, strongly encourage students to consider earning their bachelor's degree. Students should select a major that they find interesting and consider a strength.

GPA: Pharmacy schools will consider both a student's overall and math/science GPA. Math/science GPA is calculated using scores from any course taken in the departments of Biology, Chemistry, Physics, and Math. **An overall and math/science GPA of 3.3 or above is preferred. GPAs below 3.0 may need to consider Post-Baccalaureate coursework / programs before applying.**

Pharmacy College Admission Test (PCAT): The PCAT is required for some but not all pharmacy schools. Courses in General Chemistry, Biology, and Organic Chemistry 1 should be completed before taking the exam. Having a background in Anatomy & Physiology may be beneficial but is not required. This test is often taken the same summer in which the student applies to professional school (one year before walking through the doors of pharmacy school). The specific date to take the test may range from July – January depending on each student's plans. Remember, take time to prepare for the exam. The latest you should take the test is in January of the year you expect to enter pharmacy school. Favored Composite Score for Temple Pharmacy: a minimum of 50th percentile (individual section scores above a 50th percentile are also preferred).

**Biology
Chemistry
Organic Chemistry 1**

**Critical Reasoning
Quantitative Reasoning
Anatomy & Physiology**

Professional Development: Pharmacy schools will first review your numbers (overall GPA, Math/Science GPA, PCAT scores). If these are in a competitive range, they will then assess your extracurricular and volunteer experiences. Pharmacy schools do not require that students shadow in a particular area but instead have general exposure to healthcare and community service.

Letters of Recommendation: Letters for pharmacy school will be sent directly through the PharmCAS application at the time a student applies. Schools generally like to see 2-3 letters of recommendation with at least 1-2 from science faculty. Look into schools of interest for more specifics on what might be preferred.

Additional Resources:

American Association of Colleges of Pharmacy (AACP): www.aacp.org