

Pre-Pharmacy

College of Arts & Sciences
McCannel Hall, Room 280
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Grand Forks, ND 58202



The Pre-Pharmacy Program is not a major or degree-granting program at UND. In order to graduate with a degree from UND, you will need to:

- Choose a [major](#) and complete the specific requirements determined by the department responsible for that major. Pharmacy schools do not require any particular major.
- Complete the [Essential Studies requirements](#)
- Complete 120 semester credits (36 numbered 300 or above and 30 from UND)

Pharmacy schools consider the following when reviewing applications:

1. Academics

Pharmacy schools have varying pre-requisites, all of which have been taken into consideration to inform the UND Pre-Pharmacy Program curriculum so that you are prepared to apply to any school you ultimately decide to. Admission into pharmacy school requires anywhere from 1 year of undergraduate work to completion of an undergraduate degree; most schools prefer a degree. The national average GPA of matriculants in the 2022 application cycle was 3.35 (cumulative) and 3.21 (science). Regionally, the average GPA of matriculants is closer to 3.53 (cumulative).

2. Admission Testing and PCAT

For most professional pharmacy programs, admissions tests are becoming optional or no longer required/considered. The American Association of Colleges of Pharmacy (AACP) announced that the Pharmacy College Admission Test (PCAT) will be retired in 2024 due to its decline of use. The final testing cycle will take place during the 2023-2024 application cycle with limited testing date options. The test will not continue beyond this cycle. It is important you review your professional program of interest to see if they have testing recommendations or accept alternative testing.

Overall, pharmacy programs may still require you to submit the score if you have taken the PCAT in the last 5 years or may recommend the PCAT or another admissions test if your GPA is below a 3.0. Considerable time needs to go into admission test preparation (20+ hours/week), therefore we encourage students to take a lighter course load (~12 credits) the semester prior to taking an admissions test. As a Kaplan partner, UND students have access to the Kaplan test review courses and materials at a discounted rate.

3. Life Experiences

Admissions committees want to know that you have made an informed career decision and are knowledgeable about health-related professions. In addition, they are looking for applicants who have demonstrated a dedication to service. One way that they assess your nonacademic qualities is to look at how you spend your time outside of the classroom, so set yourself apart! Although formal documentation is not needed, be sure to keep track of your experiences and include dates, times, activities, meaningful experiences, and the name and contact information of your supervisor (if applicable).

a. Shadowing → 100+ hours

- Get a good feel for the profession by shadowing pharmacists in different settings such as hospital pharmacies, independent pharmacies, and chain pharmacies (Walgreens, CVS, etc.).

b. Work experience

- Pharmacy schools expect you to spend considerable time working in a health care settings. Look for Pharmacy Technician or Aide positions at pharmacies where you have the opportunity to learn about medications, work with a Pharmacist, and be a part of a health care team.

c. Community Service/Involvement

Demonstrate your desire to serve others and give back to your community. These experiences do not necessarily need to be medically-related. Participate in things that are of genuine interest to you (either in a paid position or as a volunteer) and that you can speak passionately about in your application and interview.

- Lifeguard, first responders
- Coaching/teaching sports (for park boards, travelling leagues, Special Olympics)
- Camp counseling (church camps, day camps, medical camps, music camps)
- Volunteering at your local city mission, free clinic, humane society
- College organizations (clubs, honor societies, sororities/fraternities)
- College tutoring or TA positions
- Medical missions trips

d. Research

UND has numerous opportunities for undergraduate students. Research experience is expected of students applying to top tier pharmacy schools or PharmD/PhD programs. Regardless of where you plan to attend pharmacy school, research experience can help strengthen your application.

UND Pre-Pharmacy Course Planner

UND courses required by most pharmacy schools (*needed for PCAT prep)

- BIOL 150/L: General Biology I *
- BIOL 151/L: General Biology II *
- CHEM 121/L: General Chemistry I *
- CHEM 122/L: General Chemistry II *
- Organic Chemistry
CHEM 341/L, Organic Chemistry I *
- CHEM 342/L: Organic Chemistry II *
- BIMD 301: Biochemistry *
- BIMD 220/L: Anatomy and Physiology I *
- BIMD 221/L: Anatomy and Physiology II *
- BIMD 302/L: General Microbiology *
- Physics (choose one) *
PHYS 211 & 212: College Physics I & II
PHYS 251 & 252: University Physics I & II
- Math (choose one) *
MATH 165: Calculus I
AP credit for Calculus
- A Statistics course (choose one) *
PSYC 241: Introduction to Statistics
SOC 326: Sociological Statistics
ECON 210: Business/Economic Statistics
MATH 321: Applied Statistical Methods
BIOL 470: Biometry
PHE 306: Epidemiology and Biostatistics
Other statistics course
- ECON 201: Microeconomics
- ENGL 110: College Composition I
- ENGL 130: College Composition II

UND electives good for pharmacy school preparation (+recommended for PCAT prep)

Some may be required by certain pharmacy schools; check individual requirements for schools of interest.

- BIMD 328: Introduction to Immunology +
- BIOL 315: Genetics +
- BIOL 341: Cell Biology +
- BIOL 369/L: Histology
- BIOL 390: Endocrinology
- BIOL 420: Neuroscience
- BIOL 442: Physiology of Organs/Systems
- PPT 315: Human Pharmacology +
- PHIL 120: Introduction to Ethics
- PHIL 245: Death and Dying
- SOC 110: Introduction to Sociology
- PSYC 111: Introduction to Psychology
- N&D 240: Fundamentals of Nutrition
- MED 205: Medical Terminology
- COMM 212: Interpersonal Communication
- COMM 380: Health Communication
- WGS 200: Introduction to Gender Studies
- Public Health courses
PHE 101: Introduction to Public Health
PHE 102: Epidemiology in Public Health
PHE 103: Introduction to Global Health
- Business courses
ECON 201: Microeconomics
ENTR 101: Intro to Entrepreneurship
ENTR 386: Financials for Entrepreneurs
MGMT 300: Principles of Management
MGMT 310: Organizational Behavior
- An advanced writing/humanities course
- A foreign language

Sample Four Year Plan

This is just an example to aid in your academic planning. Consult with your assigned advisor on how best to combine the pre-pharmacy curriculum with your major requirements.

	Fall	Spring	Summer
First Year	BIOL 150/L CHEM 121/L MATH 107 ¹ Courses from Group 1	BIOL 151/L CHEM 122/L Courses from Group 1	Life Experiences Direct patient care Shadowing Volunteering Research
Second Year	CHEM 341/L BIOL 315 Courses from Group 1 or 2	CHEM 342/L BIMD 220/L BIOL 341 Courses from Group 1 or 2	Life Experiences Direct patient care Shadowing Volunteering Research
Third Year	PHYS 211 BIMD 221/L Courses from Group 1, 2, or 3	PHYS 212 BIMD 301 Courses from Group 1, 2, or 3 ~12 credits for PCAT prep ³	WICHE Forms (Complete over Spring Break) PCAT (take in July) ³ 1^o Apps Due (Opens mid-July, submit ASAP) ²
Fourth Year	Courses from Group 2 or 3 2^o Apps Due (Submit ASAP) Interviews Begin (~ Oct-Feb)	BIMD 302/L Courses from Group 2 or 3	

¹ MATH 107 waived if ACT Math > 26 or AP Calc > 3 or equivalent college level math course

² Application deadlines vary by program; check deadlines of schools you are applying to.

³ See section titled "Admission Testing and PCAT on page 1.

Group 1 courses are **required**: COMM 110, ENGL 110, ENGL 130, MATH 165, ECON 201, a statistics class

Group 2 courses are good **electives**: PSYC 111, SOC 110, COMM 212, COMM 380, MED 205, N&D 240, WGS 200, a public health course, a business course, an advanced writing course a foreign language

Groups 3 courses are **upper level science electives**:

Fall courses: BIMD 328, BIOL 378, BIOL 364/L, BIOL 390, BIOL 420, BIOL 442, PPT 315

Spring courses: BIOL 369/L, BIOL 415, PPT 315