

Pre-Medicine

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



The Pre-Medicine Program is not a major or degree-granting program. 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. Medical 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)

Medical schools consider the following when reviewing applications:

1. Academics

Medical schools have varying pre-requisites, all of which have been taken into consideration to inform the UND Pre-Medicine Program curriculum so that you are prepared to apply to any medical school you ultimately decide to. The national average GPA of medical school matriculants for the 2022 - 2023 application cycle was 3.75 (cumulative) and 3.68 (science). To be a competitive applicant, you should aim for such a cumulative and science GPA and excel in all your courses.

2. MCAT

Plan to take the MCAT in May or June the calendar year before you plan to attend medical school (third year if on a four year plan). Everyone studies differently, but we recommend that you start studying 3-6 months prior to the exam. Considerable time needs to go into MCAT preparation (30 hours/week), therefore we encourage students to take a lighter course load (~12 credits) the semester prior to taking the MCAT. As a Kaplan partner, UND students have access to the Kaplan MCAT review courses and materials at a discounted rate. The national average MCAT score of medical school matriculants for the 2022 - 2023 application cycle was 512; this is a good MCAT score to aim for.

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 non-academic qualities is to look at how you spend your time outside of the classroom, so set yourself apart! You will have the opportunity to list up to 15 activities on your AMCAS application – clubs, leadership roles, honors, awards, jobs etc. 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. **Direct Patient Care** → 300+ hours

- Work or volunteer in a position in which you give direct medical care to patients, have a chance to observe and work with doctors and other health care team members
 - i. Work settings can include hospital, rehab, clinic, group care home (nursing, disabled children or adults, Alzheimer's unit, VA), hospice, home health, support services, phlebotomy, EMS

b. **Shadowing** → 20+ hours

- The majority of hours need to be with primary care doctors: family medicine, internal medicine, pediatrics. A few of the hours can be with specialists.
- Be sure to include both rural and city experiences. Regionally, experiences in Grand Forks, Fargo, Bismarck, Minot, Crookston, and Moorhead are considered city experiences.

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. Examples include but are not limited to:

- 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 research opportunities for undergraduate students. Research experience is expected of students applying to top tier medical schools or MD/PhD programs.

Regardless of where you plan to attend medical school, research experience can help strengthen your application.

UND Pre-Med Course Planner

UND courses required by most medical schools (*needed for MCAT 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 *
- CHEM 341/L: Organic Chemistry I *
- CHEM 342/L: Organic Chemistry II *
- BIMD 301: Biochemistry *
- Physics (choose one) *
PHYS 211 & 212: College Physics I & II
PHYS 251 & 252: University Physics I & II
- PSYC 111: Introduction to Psychology *
- SOC 110: Introduction to Sociology *
- ENGL 110: College Composition I
- ENGL 130: College Composition II
- Math (choose one)
MATH 146: Applied Calculus
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
- Upper-level writing-intensive course in the humanities or social sciences (*See approved list in Pre-Heath Blackboard Organization*)

UND electives highly recommended for medical school preparation (+recommended for MCAT prep)

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

- BIMD 220/L: Anatomy & Physiology I
- BIMD 221/L: Anatomy & Physiology II
- BIOL 315: Genetics +
- BIOL 341: Cell Biology +
- PSYC 250: Developmental Psychology +
- PSYC 270: Abnormal Psychology +

Additional UND electives recommended for medical school preparation

- BIMD 302/L: General Microbiology
- BIMD 328: Introduction to Immunology
- BIOL 390: Endocrinology
- BIOL 415: Genomics
- BIOL 420: Neuroscience
- BIOL 369/L: Histology
- BIOL 442: Physiology of Organs/Systems
- PPT 315: Human Pharmacology
- COMM 212: Interpersonal Communication
- COMM 380: Health Communication
- MED 205: Medical Terminology
- PSYC 335: Health Psychology
- N&D 240: Fundamentals of Nutrition
- 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
- Ethics courses
PHIL 120: Introduction to Ethics
PHIL 245: Death and Dying
PHIL 251: Ethics in Healthcare
PHIL 253: Environmental Ethics
- 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-medicine curriculum with your major requirements.

	Fall	Spring	Summer
First Year	BIOL 150/L CHEM 121/L MATH 103 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 BIOL 341 Courses from Group 1 or 2	Life Experiences Direct patient care Shadowing Volunteering Research
Third Year	PHYS 211 Courses from Group 1, 2, or 3	PHYS 212 BIMD 301 Courses from Group 1, 2, or 3 ~12 credits for MCAT prep	WICHE Forms (Complete over Spring Break) MCAT (take by Jun 15 th) 1^o Apps Due (Submit Jun 1 st - 15 th)
Fourth Year	Courses from Group 2 or 3 2^o Apps Due (Submit ASAP) Interviews Begin (~ Oct-Feb)	Upper-level writing course (humanities/social sciences) Courses from Group 2 or 3	

¹ MATH 103 waived if ACT Math > 26 or AP Calc > 3 or equivalent college level math course

Group 1 courses are **required**: COMM 110, ENGL 110, ENGL 130, MATH 146, PSYC 111, SOC 110, a statistics class

Group 2 courses are good **electives**: BIMD 220/L, BIMD 221/L, PSYC 250, PSYC 270, COMM 212, COMM 380, MED 205, PSYC 335, N&D 240, WGS 200, a public health course, an ethics 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: BIMD 302/L, BIOL 369/L, BIOL 415, PPT 315