PRE-PROFESSIONAL and HEALTH PROGRAMS

If you wish to become a physician, an optometrist, a physician assistant, a chiropractor, a dentist, a podiatrist, an occupational therapist, this fact sheet may answer some of your questions about pre-health professional programs available at North Dakota State University.

The Program

The pre-professional curricula are designed for students who intend to pursue their undergraduate or graduate education in professional schools. At NDSU, the curricula are offered by a number of departments for students interested in preparing for careers in health related fields. Most pre-professional programs are flexible and can be developed around many different majors, including biological sciences, chemistry and molecular biology, physics and psychology. Students planning to apply to professional schools should seek information from particular schools and become familiar with any special requirements.

The entry point into any of the science or mathematics sequences should be determined by you and your academic advisor on the basis of your high school preparation. High school students who take college course work as part of their high school enrollment may earn credit at NDSU. A list of approved courses is online at www.ndsu.edu/registrar/transfer/. One may earn NDSU credit for course work earned through Advanced Placement, the College Level Examination Program, International Baccalaureate or courses taken through other regionally accredited colleges and universities. (While NDSU accepts AP credit, some professional schools do not accept it because those credits are not graded. Check with individual professional schools of interest to see if they accept these credits.)

Many opportunities and services are available to NDSU students:

- Strong academic preparation in the required pre-health core of classes (in general, these requirements include a year of organic chemistry, physics, general biology, and inorganic (general chemistry);
- Broad selection of recommended classes beyond the core;
- Advisors to answer questions regarding admission procedures and to assist students in planning their programs of study;
- Opportunities to become involved in research on campus; and
- Student organizations that offer guest speakers, community service opportunities and support.
- Monthly seminars and information sessions are offered to provide information and resources regarding application and interview processes.

Extra-Curricular Activities

Pre-health professional students are encouraged to participate in on-campus student organizations such as the Pre-Med Club, AMSA, Pre-Dental Club, Pre-Physician Assistant Club and Pre-Optometry Club. These organizations are run by students with similar career goals and provide an opportunity for others to discuss career plans and gather details about the professions in which they are interested. These clubs also may offer leadership opportunities for pre-health professional students.

Applying To Professional School

Most students choosing professional careers in health fields have scholastic abilities and levels of motivation sufficient to ensure an above average grade point. Grades, however, do not tell the whole story. Admission committees also require information about you as a person. This information is brought to their attention through letters of recommendation and personal interviews. It is, therefore, important that students attempt to develop a personal relationship with responsible members of the community in general and the University community in particular. Volunteer to help in community projects such as Big Brother/Big Sister or Hospice. Work as an orderly in a hospital or as an aid in a nursing home. Interact with professors on campus. Volunteer to help in faculty research projects or initiate an individual study program under the supervision of a favorite professor. Attempt to demonstrate your social, emotional and scholastic maturity, and your individual uniqueness and talents.

Most professional schools also require that scores from admission tests be submitted with an application. It is recommended that particular health professions admission tests be taken during or at the end of one’s junior year at NDSU.

Pre-professional programs usually consist of four years of college. This is generally followed by three or four additional years in a professional school. While state-supported professional schools usually admit very few nonresidents, a resident of Minnesota attending NDSU and applying to the University of Minnesota Medical School will be given the same consideration as a Minnesota resident who has received a pre-medical education in Minnesota. Similarly, North Dakota residents are given equal priority by the University of North Dakota (UND) School of Medicine regardless of graduation from NDSU, UND or any other university of equal standing.

Contacts for Information Concerning Health Professions Admission Tests

Association of American Medical Colleges (Medical/Podiatry/Osteopathic Medicine)
Medical College Admission Test
www.aamc.org/students/

Optometric Admission Testing Program (Optometry)
www.ada.org/oat/index.html

ADA Department of Testing Services (Dentistry)
www.ada.org/

Graduate Record Exam (GRE)
(Physical Therapy/Occupational Therapy/ Physician Assistant)
ETS
www.ets.org/gre/
The Pre-Professional Curriculum

Requirements for the individual pre-health programs are available from the pre-health advisors. Advisors are available in the Department of Biological Sciences to answer questions regarding admission procedures and to assist students in planning their programs of study.

Suggested Courses

| Credits | Biology         | 4 | 150, 150L - General Biology I and Lab |
|         |                 | 4 | 151, 151L - General Biology II and Lab |
|         |                 | 4 | 220, 220L - Human Anatomy and Physiology I |
|         |                 | 4 | 221, 221L - Human Anatomy and Physiology II |
|         |                 | 4 | 315, 315L - Genetics and Lab |
| Chemistry | General Chemistry I and Lab | 4 | 121, 121L - General Chemistry I and Lab |
|         | General Chemistry II and Lab | 4 | 122, 122L - General Chemistry II and Lab |
|         | Organic Chemistry I and Lab | 4 | 341, 341L - Organic Chemistry I and Lab |
|         | Organic Chemistry II and Lab | 4 | 342, 342L - Organic Chemistry II and Lab |
| Biochemistry | Foundations of Biochemistry and Molecular Biology I | 3 |
| English   | College Composition I | 3 |
| Mathematics | Applied Calculus I | 4 |
| Microbiology | General Microbiology and Lab | 5 | 350, 350L - General Microbiology and Lab |
| Physics   | College Physics I and Lab | 4 | 211, 211L - College Physics I and Lab |
| Social and Behavioral Sciences | Introduction to Psychology | 3 | PYSC 111 - Introduction to Psychology |
| Zoology   | Cell Biology | 3 |
|           | Vertebrate Histology | 3 |
|           | Animal Physiology | 3 |

Additional recommended courses by pre-health advisor

- The courses listed above are courses that are recommended to help students prepare for professional school admission tests and to satisfy pre-requisite requirements. This is not a major that can be declared but can be completed in conjunction with the major of a student’s choice.

Students should consult their academic advisors in choosing courses. Some students decide to take courses similar to those taken in pre-health professional school, such as biochemistry or advanced biology, in an attempt to demonstrate that they can perform well in a course taught in medical school or to ease their studying during the first year of professional school.

Most medical schools require one year of English. This can be a combination of literature and writing requirements. Some schools will not consider writing across the curriculum to meet this requirement.

Transferring Credits

View NDSU equivalencies of transfer courses at: www.ndsu.edu/transfer/equivalencies

For Further Information

Tanie Boeddeker, Advisor
Department of Biological Sciences
North Dakota State University
218A Stevens
Dept #2715
PO Box 6050
Fargo, ND 58108-6050
Tel. (701) 231-9789
Fax: (701) 231-7149
Web: www.ndsu.edu/prehealth_programs

or

Jill Lodde Greives, Advisor
Department of Biological Sciences
North Dakota State University
218B Stevens
Dept #2715
PO Box 6050
Fargo, ND 58108-6050
Tel. (701) 231-5093
Email: Jill.Loddegreives@ndsu.edu
Web: www.ndsu.edu/prehealth_programs

This sample curriculum is not intended to serve as a curriculum guide for current students, but rather an example of course offerings for prospective students. For the curriculum requirements in effect at the time of entrance into a program, consult with an academic advisor or with the Office of Registration and Records. https://bulletin.ndsu.edu/undergraduate/programs/