

# PRE-HEALTH (NON-DEGREE)

## Description

The pre-health areas of study described below are advising categories used to identify students advancing toward a health-related career goal. Students cannot declare a major or earn a degree in a pre-health area. A pre-health coursework plan is developed in conjunction with an Explore Center advisor and consists of prerequisite courses required for admission into professional health schools. This coursework may be additional to coursework required for a University of Nebraska–Lincoln major. Upon successful completion of pre-health coursework, and after participating in a number of years of relevant health- and community-related activities, pre-health students apply to professional health schools in order to receive clinical training (e.g. at a nursing school, medical school, optometry school, etc.).

## Advising

The Explore Center serves as Nebraska’s advising resource for pre-health students. Pre-health advisors work one-on-one with students to provide specialized pre-health advising, which supplements advising in the academic major. In addition to meeting with an advisor for their academic major (if declared), all pre-health students should meet once per semester with a pre-health Explore Center advisor for help in planning the necessary curricular and extracurricular requirements to apply to a professional health school in the future. Pre-health advisors help students create short- and long-range plans so that they can be in the best possible position to gain admittance to a professional health school. The Explore Center also provides a number of pre-health advising resources, workshops, and events to help students develop and move forward in their health professions career plans. See <https://explorecenter.unl.edu/pre-health> for resources.

Professional academic advisors in the Explore Center are available for individual student meetings on a walk-in or appointment basis weekdays in 127 Love Library South. Pre-health students who have not yet chosen a major have an assigned Explore Center academic advisor but are welcome to meet with any advisor in the Explore Center. Students can find their assigned advisor through “My Success Network” in MyPLAN or in MyRED. For complete and current information on Explore Center academic advising visit <https://explorecenter.unl.edu/about/appointment> or contact the Explore Center by visiting 127 Love Library South or by calling 402-472-3605.

## Major Declaration

Some pre-health students declare a University of Nebraska–Lincoln major while also working toward their professional health school requirements; these students earn a degree from University of Nebraska–Lincoln before entering professional school. Some health professions schools allow students to apply after completing prerequisite requirements and without earning an undergraduate degree. In either case, students may designate a pre-health interest in any of the following pre-health categories while they are preparing for professional school and/or deciding on a major and degree. Students may select any University of Nebraska–Lincoln academic major while pursuing pre-health areas of study and can temporarily select a major of “Pre-Health” through the Explore Center. Students pursuing pre-health areas of study can receive guidance and advice from the Explore Center by indicating their pre-health interest with their college advising office and filling out a pre-professional status form. Students who are still exploring which health career path they might pursue are encouraged to research the

many options available by using the ExploreHealthCareers website (<https://explorehealthcareers.org>) and/or taking CASC 150: Introduction to Health Professions (<https://catalog.unl.edu/archives/2019-2020/search/?scontext=courses&search=casc+150>).

## Pre-Health Areas

The following are common pre-health interest areas. Curricular requirements vary by program and coursework plans should be developed with the help of the student’s Explore Center advisor to ensure all requirements are being met during the appropriate semesters and in the appropriate sequence. Detailed course checklists for each pre-health area are listed at <https://explorecenter.unl.edu/pre-health>.

### Pre-Chiropractic

Chiropractic is a branch of health care that focuses on manipulation as the best mode of care and treatment of many injuries and illnesses. It emphasizes the inter-relatedness of the body parts as a whole set, but especially as they relate to the function of the nervous system. Since the majority of the body’s organs are innervated by nerves which enter or leave the spine, a major emphasis is on the correct structure and function of the spine and the body joints.

### Pre-Clinical Perfusion Science

Perfusionists are skilled allied health professionals who deal with all phases of regulating and controlling blood flow outside the body, called extracorporeal circulation. The perfusionist operates extracorporeal equipment during any medical situation where it is necessary to support, or temporarily replace, the patient’s circulatory or respiratory function. The perfusionist has diverse responsibilities which include the mechanical support of a patient’s circulation and pulmonary function during open-heart surgery and is an integral member of the cardiovascular surgery team involved in infant and adult cardiac surgery.

### Pre-Cytotechnology

Cytotechnology is an allied health specialty which offers possibilities for those who want a career in science and a significant role in health care. Working with a microscope, cytotechnologists study specimens from all body sites. Using subtle clues in the cells themselves, cytotechnologists can solve the mystery of disease by identifying cancer, precancerous lesions, benign tumors, infectious agents, and inflammatory processes. Cytotechnologists help discover certain diseases early when treatment is most effective.

### Pre-Dental Hygiene

A dental hygienist is a preventive oral health professional licensed in dental hygiene to provide educational, clinical and therapeutic services supporting total health through the promotion of optimal oral health. The dental hygienist is responsible for providing treatment that helps to prevent oral diseases such as dental caries (cavities) and periodontal disease (gum disease) and for educating the patient to maintain optimal oral health.

### Pre-Dentistry

Dentistry is devoted to maintaining the health of teeth and gums, as well as other hard and soft tissues of the mouth. Early detection of oral cancer and systemic conditions that manifest themselves through the mouth are necessary for the maintenance of general health. The dentist is dedicated to the prevention, diagnosis, and treatment of all oral diseases and conditions. In addition to general dentistry careers, dental school graduates can pursue additional studies in one of the following dental specialties: dental public health, endodontics, oral and

maxillofacial procedures, orthodontics, pediatric dentistry, periodontics, and prosthodontics.

### **Pre-Medical Laboratory Science**

Medical Laboratory Science (also known as Medical Technology or Clinical Lab Science) is the allied health profession concerned with performing laboratory tests that are used in the diagnosis, treatment, and prognosis of disease and in the maintenance of health. The clinical lab scientist performs a full range of laboratory tests, from simple pre-marital blood tests to more complex tests to uncover diseases, such as AIDS, diabetes, and cancer. The clinical lab scientist is also responsible for confirming the accuracy of test results and reporting laboratory findings to the pathologist and other doctors.

### **Pre-Medicine**

The medical profession (allopathic, osteopathic, or podiatric) offers a wide variety of career options and specialties. On most medical teams, the physician serves as the primary diagnostician, healer, and patient advocate and remains central to the provision of health care in our country. Although most physicians provide direct patient care, some medical degree recipients concentrate on basic or applied research, become teachers or administrators, or combine various elements of these activities.

### **Pre-Mortuary Science**

Completion of a professional program in mortuary science leads to licensure as a funeral director/embalmer. Morticians deal with funeral planning, death registration, embalming, and the grief and bereavement issues of families and friends of the deceased.

### **Pre-Nursing**

The nursing profession offers a wide variety of career opportunities. Nursing training programs range from associate to bachelor's educational levels. Students who earn the BSN are prepared to assume staff nurse level positions in areas such as public health, gerontology, pediatrics, industrial settings, emergency medicine, psychiatric and mental health facilities, and acute care agencies. Students who desire advanced nursing degrees will find graduate programs leading to the masters and doctor of philosophy degrees in a variety of specialty areas.

### **Pre-Occupational Therapy**

Occupational Therapy is a health care profession using purposeful activity (occupation) as a means of preventing, reducing, or overcoming physical, social, and emotional challenges in people of all ages. An occupational therapist works with individuals whose participation in daily activities has been impaired by physical injury/illness, developmental/learning disabilities, psychological/emotional problems or the aging process. The occupational therapist carefully evaluates each person to determine physical and/or mental strengths and weaknesses, and, in conjunction with other health professionals, develops a program using purposeful activities and adaptive equipment to encourage the patient's involvement in meaningful daily living.

### **Pre-Optometry**

Optometry is the primary health profession dedicated to caring for vision. Through academic and clinical training, optometrists acquire the knowledge and skills needed to diagnose, treat, and prevent problems of the visual system. Providing health education, managing curative or preventive regimens, and supplying vision care to special groups of patients are all parts of an optometrist's work.

### **Pre-Pharmacy**

Pharmacists are responsible for drug therapy and drug distribution and must possess the scientific and technical knowledge necessary to

evaluate drug therapy for each individual patient. They must develop skill in personal relations with patients and other health professionals. Above all, they must be able to make good use of acquired knowledge and experience in arriving at sound judgments and policy decisions.

### **Pre-Physical Therapy**

Physical Therapists assess and treat disabilities and promote wellness to individuals of all ages. Their primary objective is to promote optimum human health and function. The physical therapist conducts physical evaluations to determine the patient's potential for rehabilitation and lifestyle changes indicated, as well as educates the patient and family.

### **Pre-Physician Assistant**

The physician assistant (PA) practices medicine with the supervision of a physician. As a result of extensive medical training, the PA can assume many tasks traditionally performed only by a medical doctor, thereby helping the physician to be more efficient. The PA diagnoses and treats a wide range of common medical problems, and assists the physician in the management of complex chronic illnesses. Many PAs make hospital and nursing home rounds and assist in surgery. A very important part of the PA's role is to educate the patient and the community about illness, family planning, social services, health hazards, baby and child care, and other aspects of health promotion and disease prevention.

### **Pre-Public Health**

Public health is the science and art of creating healthy communities through education, research, and promotion of healthy lifestyles. In public health, the focus is on health promotion and disease/injury prevention, in contrast to the medical model of care, which focuses more heavily upon diagnosing and treating illnesses and conditions after they occur.

### **Pre-Radiation Science Technology**

Radiation science technology comprises several disciplines that utilize radiation for diagnosis or treatment, including but not limited to radiography, nuclear medicine, diagnostic medical sonography (ultrasound), or radiation therapy technology. Students should explore options in radiation science to see which field best fits their skills and interests. The career options available to students interested in radiation sciences continually expands as technology develops.

## **College Requirements**

### **ACE Requirements**

Consistent with the mission and values of the University, Achievement-Centered Education (ACE) is based on a shared set of four institutional objectives and 10 student learning outcomes. The ACE program was approved by faculty in all eight undergraduate colleges and endorsed by the Faculty Senate, the student government, and the Academic Planning Committee in January 2008 for implementation in fall 2009. ACE aligns with current national initiatives in general education.

Key characteristics of ACE that demonstrate the benefits of the program to students:

- Students receive a broad education with exposure to multiple disciplines, critical life skills and important reasoning, inquiry, and civic capacities.
- ACE is simple and transparent for students, faculty and advisors. Students complete the equivalent of 3 credit hours for each of the ten student learning outcomes.
- Students connect and integrate their ACE experiences with their selected major.

- Students can transfer all ACE certified courses across colleges within the institution to meet the ACE requirement and any course from outside the institution that is directly equivalent to a University of Nebraska–Lincoln ACE-certified course. Courses from outside institutions without direct equivalents may be considered with appropriate documentation for ACE credit (see academic advisor).

ACE allows faculty to assess and improve their effectiveness and facilitate students' learning.

### **ACE Institutional Objectives and Student Learning Outcomes**

To meet the ACE program requirement, a student will complete the equivalent of 3 credit hours for each of the ten ACE Student Learning Outcomes (a total of 30 ACE credit hours). See the ACE website (<http://ace.unl.edu>) for the most current information and the most recently certified courses. Students should meet with an Explore Center advisor to discuss the planning and completion of ACE courses and requirements.

#### **PLEASE NOTE**

The sample 2-year plan below is a general outline of the first two years of classes for students with Undeclared, Pre-Health, or Pre-Law academic plans. Actual course selection and sequencing will vary and should be discussed individually with an Explore Center advisor. You and the advisor will discuss your individual academic goals and design a 2-year plan for declaring a major and/or pursuing a pre-health or pre-law course of study. Most pre-health and pre-law students will declare a major and create a 4-year plan for their major. Throughout those 4 years, pre-health and pre-law students should seek supplemental advising in the Explore Center to engage in 4-year planning for pre-health and pre-law academic and/or extracurricular requirements.