

# PRE-MEDICAL AND PRE-HEALTH PROFESSIONS

Program Director: Allyson D. Backstrom, PhD (backstra@canisius.edu)

## Introduction

The Dr. George E. Schreiner '43 Pre-Medical Center was established to enhance the quality of the undergraduate experience for students who wish to enter the range of health professions including medicine (allopathic and osteopathic), dentistry, podiatry, optometry, physician assistant, pharmacy, physical therapy, occupational therapy, chiropractic, nursing, public health, and veterinary medicine, among many others. For assistance in preparing for health professions not specifically detailed in this catalog, please contact the Program Director. The Pre-Medical Center supports students through one-on-one advising, hosting seminars to support students learning about various health careers and professional schools, connecting students with shadowing and volunteer activities, and assisting students with the application and interview process to gain entry into professional schools.

It is important to understand that Pre-Med/Pre-Health programs are support programs and not academic majors. Students interested in careers in medicine and other health professions may major in any academic area they choose but please note that some majors are more difficult to pair with pre-health paths that have substantial science coursework requirements. While students frequently major in biology, chemistry, or biochemistry, students also major in Spanish, mathematics, history, English, psychology, philosophy, health and wellness, and sports and exercise healthcare, among others. Further information can be found in the catalog sections for each major. Along with their academic major requirements, students complete specific prerequisite courses for their health professional schools of choice. In addition to our rigorous science prerequisites, all professional programs require a broad liberal arts education which is achieved through the Core Curriculum or the All College Honors Program. Specific requirements vary from one professional school to another so it is important for students to utilize the advising services of the Pre-Medical Center beginning in their first college year or as soon as they become interested in pursuing a health profession. For a more detailed description of the program please go to the Pre-Med/Pre-Health website (<https://www.canisius.edu/academics/programs/pre-medical-and-pre-health-professions/>).

## Advisement

All pre-med/pre-health students should register with the Pre-Med Center upon arrival at Canisius their first year. Additionally, students who develop an interest in the health professions after beginning their studies at Canisius are able to register with the Pre-Med Center at any time. Pre-Health advisors assist students in all aspects of their preparation for entry into the health professions and serve in addition to academic major advisors. All students should work closely with the advisor in their major and the Pre-Health advisor in discussing career expectations, choosing major electives, developing their entire academic program, and planning co-curricular or supplemental academic experiences. This process should start as early as possible. The Pre-Health advisors assist students in completing appropriate documentation each year to maintain good standing in the Pre-Med/Pre-Health program.

## Qualifications

To meet minimal requirements for most health professions, students should maintain a minimum GPA of 3.0. Students with a GPA lower than this should contact the Program Director for assistance. Higher GPAs are needed to

be competitive applicants for most health professions with many programs looking for a GPA of 3.6. Science GPAs are often evaluated separately and must also be competitive. Competitive scores on professional exams (MCAT, DAT, GRE, PCAT, OAT, etc.), demonstrated commitment to serving others, and thorough exploration and understanding of the desired profession are also critical. Full understanding of the profession includes multiple shadowing experiences with different professionals over time and either volunteer or paid clinical experiences. The Pre-Medical Center will help students plan appropriately for each of these qualifications. Students interested in pursuing professional school in any health profession should be highly engaged in campus activities, particularly the student clubs and other activities curated by the Pre-Medical Center. Students should also be active in meaningful service to the Buffalo community. It is important to learn about health disparities, health equity, and other social justice issues. Special academic seminars, internships, and medical travel opportunities are also available.

## Early Assurance and Joint Degree Special Programs

Canisius maintains relationships with health professional programs allowing students to gain early acceptance into medical, dental, pharmacy, and optometry programs, among others. Relationships with professional schools also allow for students to apply while in high school and be admitted into joint programs upon enrolling at Canisius or during the first or second college year. These programs are competitive and appropriate for the highly motivated student who has thoroughly explored the health professions to develop an understanding of and commitment to their chosen profession. Depending on the program, an outstanding high school record or early record in college is required. While Canisius does not require an ACT or SAT score, some early assurance and joint programs do require these scores. Please contact the Pre-Medical Center for the most up-to-date details on the various programs and to learn the required steps in the application process.

### Early Assurance Programs

A Pre-Medical early assurance program at Canisius is offered in conjunction with the Lake Erie College of Osteopathic Medicine (NY, PA, and FL campuses). A Pre-Dental early assurance program is offered in conjunction with the LECOM School of Dental Medicine (Bradenton, FL). A Pre-Podiatric Medicine early assurance program is offered in conjunction with the LECOM School of Podiatric Medicine (Erie, PA). A Pre-Optometry early assurance program is offered in conjunction with the State University of New York College of Optometry (New York City and Syracuse, NY). The Pre-Medical Center also works with students to apply to early assurance programs open to students at all colleges such as the State University of New York Upstate Medical University (Syracuse, NY) Doctor of Physical Therapy program. A Pre-Pharmacy early assurance program is offered in conjunction with the LECOM School of Pharmacy (PA and FL campuses) and D'Youville University. The Early Opportunity in Medicine Program is an Early Acceptance Program that we hold with the SUNY University at Buffalo Jacobs School of Medicine and Biomedical Science. The JSMBBS is currently making some adjustments to this program. Please contact the Director of the PreMedical Center, Dr. Backstrom, for additional information.

### Joint Degree Programs

Canisius has seven-year joint degree programs with the following professional schools: University at Buffalo School of Pharmacy, LECOM School of Pharmacy, D'Youville University School of Pharmacy, and the SUNY State College of Optometry, among others. The first three years are spent at Canisius and the last three or four years at the professional

school. A bachelor's degree (BS) will be awarded from Canisius after completion of the first professional year of pharmacy or optometry school. The PharmD, OD, or other appropriate professional degree will be awarded at the end of seven years. To remain in good standing, students must fulfill all requirements established by the professional school and Canisius.

## Guaranteed Admission Programs

Canisius students in the Sports and Exercise Health Care major meeting all requirements are guaranteed admissions to the D'Youville University Doctor of Physical Therapy (DPT), Doctor of Chiropractic (DC), or Master of Occupational Therapy (OT) programs. Contact the Pre-Medical Center for specific requirements for these programs.

## Courses

### HRP 101 Introduction to Health Professions 1 Credit

This course is designed for students who are considering careers in the health-related professions: medical, dental, and allied health fields. The health professions are one of the largest growing industries in the country, and many options exist for students to consider. In this course students will gain a greater understanding of the various health-related professions and hear from practitioners and clinicians who are currently working in the field. This is a 1-credit hour course and will meet once per week.

**Offered:** occasionally.

### HRP 111 Medical Terminology 1 Credit

This introductory course in medical terminology focuses on prefixes, suffixes, word roots and their combinations to build basic medical vocabulary. Terminology related to anatomy, physiology, symptomology, and pathology will be included.

**Offered:** spring.

### HRP 201 Topics in Medical Specialties Seminar I 1 Credit

These seminars facilitate in-depth exploration of special topics in health and health care such as Primary Care, Social Medicine, and Medical Specialties.

**Prerequisite:** permission of the program director.

**Offered:** occasionally.

### HRP 202 Topics in Health Professions Seminar II 1 Credit

These seminars facilitate in-depth exploration of special topics in health and health care such as Primary Care, Social Medicine, and Medical Specialties.

**Prerequisite:** permission of the program director.

**Offered:** occasionally.

### HRP 497 DENT Neurologic Institute Internship 3 Credits

This internship is offered to introduce junior and senior pre-med and pre-physician assistant students to the field of neurology by serving as a medical scribe for physicians and physician assistants at the DENT Neurologic Institute. Students must apply and be accepted into this internship and have transportation to DENT.

**Offered:** every fall, spring, & summer.

### HRP 498 PEPID Medical Informatics Internship 3 Credits

The purpose of this internship is to introduce students to the concepts of medical informatics. This overview course will provide a broad exposure to the field of informatics and the students will learn how information is created, interpreted, processed, stored and applied in healthcare with the help of modern technology.

**Prerequisite:** Permission of the program director & competitive application to PEPID.

**Offered:** occasionally.

### HRP 499 Health Professions Internship 3 Credits

Research or other practical experience related to the health professions.

**Prerequisite:** permission of the program director.

**Offered:** fall & spring.