

# PRE-MEDICAL AND PRE-HEALTH

Fordham has a long history of preparing students for medical, dental, veterinary, and other allied health careers. Fordham graduates have been accepted to numerous medical schools, including Harvard, Yale, Cornell, Columbia, New York University, Albert Einstein, Mount Sinai, New York Medical College, Tufts, Creighton, Johns Hopkins, Georgetown, Tulane, Loyola University of Chicago, all of the SUNY medical schools, as well as many osteopathic schools of medicine. Students have also gained admission to many top-tier schools of dentistry, optometry, podiatry, and veterinary medicine.

Fordham's pre-health professions program provides both individual and group advising from the pre-health program advisers throughout their undergraduate years. Group advising sessions are class-specific (first year, sophomore, junior) and are scheduled to help students plan for significant upcoming events, such as taking the MCAT. Students are also encouraged to meet individually with the pre-health program advisers to discuss their progress in attaining acceptance into a health professions program.

Health professions programs do not require a specific major, but instead value a breadth of education along with the completion of specific coursework. Students preparing for a doctoral-level health professions career may therefore pursue majors in the natural sciences, social sciences, or humanities.

## Post-Baccalaureate Pre-Medical/Pre-Health Program

The Fordham post-baccalaureate pre-medical/pre-health program is offered through Fordham School of Professional and Continuing Studies (PCS).

See the Fordham School of Professional and Continuing Studies section of the bulletin for further information.

## Program Requirements

### Pre-Health Professions Program

Students focused on entering a health profession program such as medicine, dentistry, veterinarian medicine, nursing, or other health professional schools will require successful completion of majors-level science coursework and labs. The courses listed below constitute the minimum requirements for a health professional school application:

The courses listed below constitute the minimum requirements for an application to most health profession programs, regardless of major:

- One year of general biology with lab (BISC 1403, BISC 1404, BISC 1413, BISC 1414)
- One year of general chemistry with lab (CHEM 1311, CHEM 1312, CHEM 1321, CHEM 1322, CHEM 1331, CHEM 1332)
- One year of organic chemistry with lab\* (CHEM 2511, CHEM 2512, CHEM 2521, CHEM 2522, CHEM 2541, CHEM 2542)
- One year of general physics with lab (PHYS 1501, PHYS 1502, PHYS 1503, PHYS 1511, PHYS 1512) or (PHYS 1601, PHYS 1602) or (PHYS 1701, PHYS 1702)
- One year of English (satisfied by core requirements)

\*General chemistry, including labs, must be successfully completed before enrollment in organic chemistry.

Students planning on completing additional coursework in the sciences should note that the biology and general chemistry foundation courses, plus all applicable labs (all listed above), must be successfully completed prior to enrollment in all upper division biology courses.

In addition, students applying to medical school are required to take the following coursework to meet the required competencies:

- One semester of biochemistry\*\* BISC 3521)
- One semester of psychology (PSYC 1200)
- One semester of sociology (SOCI 1100)
- One semester of statistics (MATH 1205, SOCI 2606, ECON 2140, PSYC 2000)

\*\*Biology, general chemistry and organic chemistry plus all labs must be completed before enrollment in biochemistry.

All pre-health students, no matter what their primary fields of study, should master the major concepts and skills of science and mathematics, and are generally advised to take additional upper-level science coursework to help prepare for standardized entrance exams. In addition, some health professional schools may require calculus as a prerequisite. Subtle variations in this coursework may be necessary for application to programs specific to each discipline.

Students planning to apply to a health professional school are advised to take the appropriate standardized admissions test—MCAT, DAT, OAT, or GRE—in the spring or early summer of the application year at the latest.

## Early acceptance into Doctor of Physical Therapy Program (D.P.T.)

Fordham University has an early acceptance agreement with New York Medical College (NYMC), for the Doctor of Physical Therapy degree. This program is designed to prepare competent and caring physical therapists that will be able to skillfully practice in a variety of clinical settings and evolve with changes in the health care system.

For a detailed description of the Doctor of Physical Therapy program at New York Medical College, visit their website at [www.nymc.edu/pt](http://www.nymc.edu/pt). Students pursuing any major are welcome to apply. Applicants to the Early Acceptance Program should have an academic record that includes a grade point average of at least a 3.2 with a balance of coursework in humanities, social science, and natural science, including required majors level courses, with no grade below C+ in any prerequisite course, including the initial grades of courses that are retaken. No more than one grade of C+ in prerequisite courses.

The following prerequisites, required for admission, should all be taken at Fordham University. The grades of ALL courses are included. Retaking a course does NOT eliminate that course grade from the GPA calculation. Prerequisites taken at an alternate university must be approved by the admissions committee of New York Medical College. See your pre-health advisor to facilitate this request.

- Biology (one general or upper-level course with lab\*)
- Physics I and Physics II (each with lab\*)
- Chemistry I and Chemistry II series (each with lab\*)

- Anatomy & Physiology I and Anatomy & Physiology II series (each with lab\*), OR Anatomy (one course with lab\*) and Physiology (one course with lab\*). Human Anatomy is recommended, but not required.
- Psychology (two courses; physiological or human systems courses preferred)
- Mathematics (one course)
- Statistics (one course)
- All labs must be on campus, in-person labs; online labs are not permitted.

Graduate Record Examination: Scores on the Verbal, Quantitative, and Analytical Writing sections of the Graduate Record Examination (GRE) must meet or exceed the minimal program standards listed on the Physical Therapy Centralized Application Service (PTCAS) program page for New York Medical College.

Applicants must also complete at least 100 total hours of volunteer/work experience across two or more physical therapy settings under the direct supervision of a physical therapist. It is preferred that these settings serve patient populations with a variety of medical diagnoses.

## Early acceptance into Master of Science (M.S.) Program in Speech-Language Pathology

Fordham University has an early acceptance agreement with New York Medical College (NYMC), for the Master of Science program in speech-language pathology. The speech-language pathology program at NYMC is one of the very few such programs located in a medical university setting, and also one of a few programs with a strong focus on public health. For a detailed description of the Master of Science program in speech-language pathology, visit the program's website at [www.nymc.edu/slp](http://www.nymc.edu/slp).

Although no formal major is required, speech-language pathology is an applied science that requires an aptitude in foundational sciences. Applicants to the Early Acceptance Program should have an academic record that includes a grade point average of at least a 3.4 and a balance of coursework in humanities, social science, and majors-level natural sciences, including

- Introductory Biology (one course with lab) OR General Biology (one course with lab)
- Physics I OR Chemistry I (each with lab)
- Courses in Psychology and/or Sociology (total of at least two courses)
- One course in Mathematics OR Statistics

Any student interested in pursuing admission to an early acceptance program should speak with his or her pre-health adviser as soon as possible.

## Program Activities

### First-Year Pre-Health Symposium

The First-Year Pre-Health Symposium is a one-credit course offered in the first semester of students' first year at the Rose Hill campus. In this course, students read widely about diverse issues facing the medical professions. They also explore ways to engage fully in the academic and extracurricular life of the University. In addition, they work in small groups to discuss challenges common to first-year students in pre-professional programs and propose ways to meet such challenges. First-year students

in this symposium work with peer mentors and participate in the student pre-health organization meetings (The Laennec Society).

### Science Integrated Learning Community (SILC)

First-year science majors and pre-health program students enrolled in science courses have the option to live in the Science Integrated Learning Community (SILC), a residential community on the Rose Hill campus. First-year science majors and pre-health program students occupy two wings of a first year residence hall. The first-year students living in SILC receive support and peer mentoring from the two science major resident assistants and peer tutors living on the floor. SILC brings together those students who are enrolled in science courses and want to quickly find a support network among their peers. Residents engage in science related activities and participate in events focused on concerns of first-year science students.

### Research Opportunities

Fordham students have ample opportunities to participate in undergraduate research programs with faculty and gain exposure to the most recent scientific development. Numerous students are active in research projects not only during the summer months, but also during the academic year. Many have presented their research at professional conferences and Fordham's own Undergraduate Research Symposium, and still more are co-authors on scientific publications and contribute to *The Fordham Undergraduate Research Journal (FURJ)*. In addition to participating in research projects on campus, Fordham students are also doing research at the Louis Calder Center (Fordham's biological field station for ecological research), and other nearby locations including Memorial Sloan-Kettering Cancer Center, Rockefeller University, the Wildlife Conservation Society at the Bronx Zoo, the New York Botanical Gardens, Albert Einstein College of Medicine, St. Barnabas Hospital, and the American Museum of Natural History.

### Opportunities to Acquire Clinical and Volunteer Experience

Fordham's location in New York offers numerous opportunities for students to participate in volunteer programs, obtain physician shadowing experience, work in numerous nearby hospitals, and gain experience through summer internships. Many students gain clinical experience at nearby hospitals, many within walking distance of the campus. Fordham students are actively involved in outreach to the local community and volunteer their time tutoring children from the nearby schools, providing peer mentoring to high school children on health-related issues and serving at local soup kitchens.

### Pre-Health Professions Library

The pre-health professions program maintains a library of books focusing on medicine. Most of these books are authored by physicians, but many are written by patients. Some are written by physicians who have experienced medical crises from the patient's perspective. Students may visit the library in Keating 320, and they may check out books for a period of four weeks.

### Laennec Society

The Laennec Society is an organization for students interested in doctoral level health-professional fields. The Laennec Society promotes academic excellence, provides essential information about health-professional occupations, and encourages future healthcare professionals to engage in meaningful service to the community and to each other. The Laennec Society also sponsors lectures by alumni working in health care and by admission's representatives from

professional schools. In addition, it shares information from recent graduates about their experiences in professional school. The Laennec Society focuses some of its meetings on issues pertinent to students in a specific undergraduate year. Seniors attend workshops on interviewing skills, while juniors work together to approach professional school exams and the primary and secondary application processes. Sophomores focus on developing leadership in appropriate service, extracurricular, and research activities. First-year students are welcome at all meetings and have an opportunity to participate in events targeted to their specific needs.

## **For more information**

Visit the pre-health program web site.