Health Sciences

In the Jesuit tradition, health science studies at Gonzaga sharpen the mind and inspire the heart. Through pre-professional “tracks” and the University Core Curriculum, students receive a strong background in science and the comprehensive liberal arts education necessary to develop a philosophical and humanitarian perspective to understand and be committed to addressing social and ethical issues related to health care. The Gonzaga pre-professional health science tracks aim to prepare students for medical, dental, veterinary, and allied Health Sciences programs and realize their passion to pursue a career in which they dedicate their lives to leadership and service.

THE PROGRAM

Many paths may lead a student to become a practicing member of the medical community. Students interested in medicine as a practicing professional, teacher, or researcher choose and complete a regular undergraduate major under the supervision of their academic advisor. Health Science students must demonstrate strong achievement and aptitude in the natural sciences. Professional school requirements are in most cases embedded within Biology, Biochemistry, and Human Physiology majors; however, a science major is not required. Admission committees consider each candidate based on a record of academic success, score on the standardized entrance examination (MCAT, DAT, or the GRE), personal characteristics — which are further developed through Gonzaga’s Core Curriculum, demonstrated commitment to service, and exposure to the chosen career field.

Students select a major based on individual interests and potential alternative career plans as well as a thorough exploration of the sum of requirements for their degree and entry into specific professional programs. All pre-professional health science students should complete certain science courses as minimum preparation for professional programs. These courses should be finished prior to the spring semester of the junior year, which is when most students take standardized entrance examinations.

CURRICULUM

The following courses offered at Gonzaga are recommended for students interested in health science programs (note that many of the science courses have co-requisite labs):

Chemistry
- General Chemistry
- Inorganic Chemistry
- Organic Chemistry I & II
- Biochemistry

Biology
- Information Flow in Biological Systems
- Energy Flow in Biological Systems
- Genetics

Physics
- 2 semesters of general physics

English
- 1 semester each of composition and literature

Social Sciences
- 1 semester each of introductory sociology and psychology

Math
- 1 semester of calculus or statistics (math requirements may vary based on graduate and professional programs)

Other
- At least 1 additional course from biology, chemistry, or human physiology
HEALTH SCIENCE GRADUATION REQUIREMENTS

Most professional schools require relatively few classes, but strongly recommend a longer list of classes and recognize that additional coursework is essential in order to be successful on the entrance examination. Students are advised to exceed minimum admission requirements as well. It is important to check the schools of interest to determine their required and recommended classes. Professional schools also appreciate the increased knowledge base that comes from taking a diverse selection of courses in topics outside those that are required or recommended. It is strongly recommended that students take a broad course of study, with a combination of coursework in the social sciences, humanities, language, literature, and fine arts. Students should consult with their major advisor and the Committee on Health Science Careers to determine the courses necessary to best prepare them for their desired career track.

It is also important that students interested in health care careers demonstrate a commitment to a life of service and therefore have a strong record of participation in meaningful service experiences. As part of our mission, Gonzaga fosters this commitment and provides opportunities for students to engage with the community by participating in service programs such as Science in Action!, Campus Kids, and other initiatives that promote social justice and solidarity with the poor and vulnerable.

RESEARCH OPPORTUNITIES

Professional and graduate schools also recognize the value of meaningful research experiences, which provide students with a deep understanding of a topic, individualized mentoring, and exposure to additional career paths.

Students at Gonzaga have excellent opportunities to participate with faculty both on- and off-campus in fascinating research on a broad range of topics, including those with direct connections to human health and medicine (e.g. viral transmission, diagnostic agents for neurodegenerative diseases, transcription factor proteins and Parkinson’s disease). Typically, about 45 students hold paid research assistantships every summer; most students work with Gonzaga faculty while others are able to secure competitive research positions through our partnership with UW-Medicine in Seattle, labs at WSU-Spokane, and federally-funded summer undergraduate research programs across the country. These research projects often culminate in published results and presentations at regional or national meetings. Research experiences are also offered throughout the academic year for pay or for academic credit, particularly for Biology majors who add the Research Concentration. Students not majoring in the sciences can hone their research skills by arranging individual projects within their own academic disciplines.
ADMISSION INTO HEALTH SCIENCES PROGRAMS

Students planning to study a health sciences field at the graduate or professional level must demonstrate the ability to achieve a consistent record of high academic performance while tackling a comprehensive and challenging curriculum.

Standardized admission tests are used to ensure that a high undergraduate GPA reflects thorough comprehension of course materials and not merely short-term memory skills. These tests include the DAT for dental schools and the MCAT for medical schools, osteopathy, and select veterinary schools. Some veterinary schools and other allied Health Science programs require the GRE instead. In addition to scoring well on standardized tests, professional school candidates should incorporate complementary extracurricular activities into their schedules. Hands-on experience in a health-related setting is an important factor in professional school admission. This type of experience exposes students to the complex duties expected of today’s health-care professionals and enables them to make an informed career decision. Spokane is a major medical technology center, with six hospitals and a variety of specialty clinics, and offers students numerous volunteer and internship opportunities.

Professional schools assess non-cognitive qualities through letters of recommendation and personal interviews. Although most graduate programs ask for individual letters of recommendation, the primary source of recommendation letters for professional schools is the Committee on Health Science Careers, a group of Gonzaga faculty members who provide advising assistance to students pursuing a career in health sciences.

THE COMMITTEE ON HEALTH SCIENCES CAREERS

Made up of professors and staff from several departments, including Biology, Chemistry, Physics, Human Physiology, English, Sociology, Psychology, Career and Professional Development, and the Center for Student Academic Success, the Committee on Health Science Careers provides guidance on classes, research, and internship opportunities to students. Under the supervision of their major advisor and the Committee, students are invited to attend mock interviews and workshops for writing personal statements for their graduate program applications. Students also submit their personal statements for the Committee’s review. Additionally, the Committee drafts most letters of recommendation for pre-medicine, pre-dental, and pre-veterinary students and provides practical, constructive advice to those seeking entrance to professional schools in the health sciences. The Committee stresses the importance of student initiative throughout the advisory and application process; it also highly encourages students to volunteer and become involved in social justice causes that they value, both to strengthen their candidacy as graduate and professional school applicants and for the personal growth that often accompanies these activities.

Although some students attend professional schools immediately following the completion of their undergraduate degrees, it is common for students to enter these programs several years after graduating from college. In fact, the average age of all first-year medical students is typically 25. Gonzaga graduates often choose to work or volunteer with programs that include the Jesuit Volunteer Corps, AmeriCorps, the Peace Corps, and Teach for America before pursuing an advanced degree.
OUTCOMES

Both state-supported professional schools and private schools nationwide recognize the excellence of Gonzaga’s health science studies. The admission rate of Gonzaga University graduates to medical school is typically around 60%, a rate that is generally double the national average. Dental school admission rates for Gonzaga graduates are typically about 80%.

A list that shows recent graduate programs that students have been admitted to is provided below.

DENTAL SCHOOLS
• Creighton University
• Harvard University
• Marquette University
• Oregon Health & Science University
• University of British Columbia
• University of California, Los Angeles
• University of Colorado
• University of Southern California
• University of Washington

MEDICAL SCHOOLS
• Baylor University
• Boston University
• Brown University
• Case Western Reserve University
• Creighton University
• Emory University
• Georgetown University
• Loyola University Chicago
• Mayo Medical School
• Medical College of Wisconsin
• Northwestern University
• Oregon Health & Science University
• St. Louis University
• Tulane University
• University of Colorado
• University of Hawaii
• University of Massachusetts Medical School
• University of Minnesota
• University of Nebraska
• University of Nevada, Reno
• University of North Carolina
• University of Southern California
• University of Utah
• University of Vermont
• University of Washington
• Vanderbilt University
• Wake Forest University

VETERINARY SCHOOLS

Though fewer in number, students applying to veterinary school have also done quite well in the admission process in recent years. All recent applicants on record as having applied for veterinary studies programs following their graduation received offers of admission.

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