



Human Biology, Health, and Society

Biology in the context of life

The Human Biology, Health, and Society major provides a strong background in human biology while preparing students to investigate health issues from a social science perspective. The biological bases of health and illness of individuals are critically examined alongside the social, psychological, economic, cultural, and policy aspects. In addition, coursework in Nutritional Sciences allows students to comprehensively and holistically focus on health and wellness.

Program Highlights

- Biological and social aspects of growth and development
- Biology and behavior
- Biology and health promotion
- Metabolism, genetics, and health

Innovations in health and a changing approach to its management are redefining the healthcare industry and the roles of health professionals. The breadth and depth of the Human Biology, Health, and Society major prepares students for work in this complex and dynamic environment.

Human Biology, Health, and Society is especially appropriate for students desiring careers as health care practitioners—physicians, physician assistants, nurse practitioners, wellness counselors, physical therapists, and genetic counselors. It can also lead to a career in biomedical research, exercise science, pharmacology, toxicology, health communications, gerontology, or health education. Many graduates go on to advanced study to further their career goals.

Curriculum

All students in this highly flexible major complete college requirements in the natural and social sciences, humanities, writing, statistics,

and demonstrate math competency to the calculus level.

The major requires advanced courses in biology and chemistry, often with two science courses in the same semester. A year of introductory chemistry and biology leads to an 8-credit organic chemistry sequence, plus classes in physiology and biochemistry. Students choose two advanced electives in biology such as genetics, cell biology, neurobiology, evolution, microbiology, and nutrition.

Health issues such as infant behavior and development; obesity and regulation of body weight; human sexuality; and health, poverty, and inequality are considered in various elective courses.

Advanced elective courses focus on human biology, health, and society, including topics such as nutrition, health, personality development, biomedical materials for human body repair, or ergonomics.

The major requires one semester of physics,

Requirements in the Major

- Introductory Chemistry with lab
- Introductory Biology with lab
- Organic Chemistry with lab
- Principles of Biochemistry
- Anatomy and Physiology
- Physics
- Calculus
- Statistics
- Introductory courses in two different areas of social science selected from anthropology, economics, psychology, or sociology
- Nutrition, Health, and Society

Two additional advanced biology courses (6 credits) selected from any of the following areas:

- Genetics
- Cell Biology
- Biochemistry
- Physiology
- Evolution
- Microbiology
- Neurobiology
- Nutrition

Two courses (6 credits) integrating a social science perspective on health chosen from selected courses such as

- Nutrition Communications and Counseling
- Public Health Nutrition
- Human Development: Adulthood and Aging
- Human Bonding
- Fundamentals of Population Health
- Contemporary Issues in Women's Health
- The U.S. Health Care System
- Sociology of Medicine

Two courses (6 credits) integrating a natural science perspective on health chosen from selected classes such as

- Maternal and Child Nutrition
- Nutrition and Disease
- Nutrient Metabolism
- The Human Brain and Mind: Biological Issues in Human Development
- Affective and Social Neuroscience
- Psychobiology of Temperament and Personality
- Public Health Microbiology

but students who wish to complete premed requirements should take two semesters of physics.

Special Opportunities

Beyond formal course work, students may take advantage of other engaged learning opportunities. Field placements, joining a faculty member's research team, and conducting independent research can add a significant experiential component to the course of study, providing valuable practical knowledge while testing students' academic or career interests. Students can assist in medical practices, learn procedures for biomedical research, and develop educational programs for school-age children.

Students can apply to study abroad through a Cornell-sponsored program, overseas university, or a program sponsored by another institution. Off-campus study is also offered through one of Cornell's internship-based programs—Cornell in Washington; the Capital Semester in Albany, New York; or Human Ecology's Urban Semester in New York City.

Cornell's Sloan Program in Health Administration prepares future leaders in health care administration to manage health care institutions and to analyze how government policies and programs affect the health care sector of the economy and the institutions they manage. Undergraduates are eligible to apply to the Sloan Program in their junior year for a five-year BS/MHA degree.

Careers

Many Human Biology, Health, and Society students go on to graduate or professional school in medicine, dentistry, health administration, nutrition, physical therapy, nursing, or other health sciences. The broad perspective of the program prepares them for the complex settings, organizations, and specialties they will encounter in their advanced study.

In recent years, graduates have been offered admission to numerous medical schools, including Cornell, Yale, Baylor, Vanderbilt, Mount Sinai, and

Albert Einstein, as well as Harvard and Columbia dental schools.

Students who seek employment immediately after graduation can apply their strong background in the biological and the social aspects of health to positions in research, communications, education, and business.

Selected Graduates

AIDS cellular immunology research on South African strains Harvard Medical School and Massachusetts General Hospital, Boston, Massachusetts

Doctor Memorial Sloan Kettering Cancer Center, New York, New York

Equity research analyst Suffolk Capital Management, New York, New York

Family employment advocate Community Action Duluth, Duluth, Minnesota

Nutritionist Women, Infants, and Children (WIC), Washington, D.C.

Physical therapist, Stanford Hospital, Stanford, California

Project manager E-Commerce Group, Capital One, Richmond, Virginia

Quality assurance associate Pharmaceutical Manufacturing Research Services, Inc., Horsham, Pennsylvania

Research analyst Health Care Policy Practice, Lewin Group, Falls Church, Virginia

Research fellowship Bill Emerson National Hunger Fellowship, Congressional Hunger Center, Washington, D.C.

Research project coordinator Neonatal Sepsis Study, Valley Children's Hospital, Madera, California

Senior counsel Office of the Corporation Counsel, Law Department, City of New York, New York

For More Information

www.human.cornell.edu/dns

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