

## B.S. Major in Human Biology, Health and Society

**General Education: 42 Credits; Major: 52-53 Credits; Elective Credits: 25-26 credits**

This program provides students the opportunity to acquire knowledge and develop skills in one of four areas of concentration: Biotechnology, Environmental Health, Public Health, Movement Science. It does this by building a strong science foundation with two years of core science courses, a foundational common themed course and a capstone experience. Students then choose one of the four paths which include a collection of courses from an array of disciplines in the area of concentration. All students complete an internship and/or research experience in their selected path and can broaden or deepen their learning by choosing from a large selection of elective courses.

The **Biotechnology** concentration is focused on skills and career preparation. A BA in this concentration prepares students for careers in biomedical science labs and allows our students to leverage our large Biology alumni network in the NYC area.

The **Environmental Health** concentration provides science-centered training in a highly integrated context, with inputs from other disciplines. This prepares students for a variety of careers in this emerging health field linked with multiple internship opportunities that exist in NYC.

The **Public Health** concentration enhances the scientific basis for public health training while incorporating psychology, social science, philosophy and public policy aspects of the field. This BA will prepare students to work immediately in the field or pursue a graduate degree in public health, epidemiology, and other related fields.

The **Movement Science** concentration provides Biology majors the option of pursuing the equivalent of the *Body Science and Motion* concentration (which is restricted to Dance majors only) within a robust science foundation. This BA will prepare students for a variety of professional programs, (e.g. physical therapy and exercise science) by providing science-focused movement training.

### Learning goals of Human Biology, Health and Society Major:

Upon completing this major student will be able to:

- Explain the multiple determinants of human health and well-being from a multidisciplinary perspective.
- Apply the principles of human biology to the physiological and biochemical aspects of human health.
- Display competency in career-related skills needed to enter the workforce.
- Demonstrate appropriate training and preparedness for the pursuit of post-baccalaureate careers, advanced degrees, or professional programs.
- Effectively communicate scientific information orally and in writing.

### Required courses: (25 credits)

BIOL 220 General Biology I (4)

BIOL 222 General Biology II (4)

BIOL/MATH 218 Biostatistics (3)

BIOL 108 Biology for the Informed Citizen (3)

CHEM 233 General Chemistry I (3)

CHEM 234 General Chemistry I: Lab (1)

CHEM 235 General Chemistry II (3)

CHEM 236 General Chemistry II: Lab (1)

BIOL 497 Science Research (3)

**Choose one concentration: (21 credits)**

Concentration 1: Biotechnology

BIOL 251 Laboratory Research Methods I (2)  
BIOL 252 Laboratory Research Methods II (2)  
BIOL 240 Cellular & Molecular Biology (4)  
BIOL 332 Bioethics (3)  
BIOL/CHEM 340 Introduction to Organic and Biochemistry (4)  
BIOL 425 Genetics (4)  
BIOL 397 Science Research (2)

Concentration 2: Environmental Health

ENV 115 Environmental Science (3)  
PBH 210 Introduction to Epidemiology (3)  
BIOL 317 Nutrition and Health (3)  
CHEM 312 Poisons, People and the Environment (3)  
BIOL 392 Ecology (3)  
ENV 306 Environmental Ethics (3)  
ENV 497 Research (3)

Concentration 3: Public Health

PBH 110 Introduction to Public Health (3)  
PBH 210 Introduction to Epidemiology (3)  
PBH 215 Global Health (3)  
BIOL 310 Biological Basis of Public Health (3)  
BIOL 317 Nutrition and Health (3)  
BIOL 332 Bioethics (3)  
PBH 497 Research (3)

Concentration 4: Movement Science

BIOL 116 Nutrition (3)  
BIOL 136 Anatomy (4)  
BIOL 234 Human Physiology (4)  
DANC 261 Introduction to Movement Analysis and Notation (3)  
DANC 369 Anatomy II (3)  
DANC 371 Somatic Awareness (3)  
DANC 499 Independent Study/Internship (1)

**Choose two of the following electives (6-7 credits)** (\*any course in alternate concentration can also be used as an elective)

BIOL/NEU 335 Developmental Neurobiology (3)  
CHEM/ENV 105 Chemistry and the Environment (3)  
NEU 348 Drugs and the Brain (3)  
DANC 303 Anatomy I (3)  
ENV 310 Applied Environmental Science (3)  
PHYS 201 Introduction to Physics (4)  
PSYCH 201 Developmental Psychology I (3)  
PSYCH 243 Intro to Health Psychology (3)  
SOC 359 Race and Ethnicity (3)