

An interdepartmental program

## Health: Science, Society, and Policy

Courses of Study:  
Minor  
Major (BA/BS)

### Objectives

The major in health: science, society, and policy (HSSP) is designed to provide interdisciplinary study of health and health care. The major has three objectives: (1) to expand students' understanding of the biological, behavioral, social, and environmental factors that promote health or cause illness; (2) to introduce students to the political, economic, legal, public health, and organizational dimensions of health care systems in the United States and throughout the world; (3) to provide students with hands-on experience in either an internship (in a health care delivery, public health, or advocacy organization), a laboratory (studying the biological basis of health, behavior, or disease), or a field-based research project (investigating aspects of health or illness in a social context). This major draws upon courses in the social sciences, life sciences, and the fields of policy and management and is especially appropriate for students preparing for careers or further study in health and medicine as well as students who want to examine the issues and concerns of this important sector in society. The major can be completed with either a BA or BS degree.

The minor in HSSP is designed to provide an introduction to interdisciplinary study of health and medicine and to supplement a student's major.

### How to Become a Major or a Minor

Students can begin study in the HSSP major or minor with virtually any course in the program (except the Internship, Senior Research, or HSSP 100a or HSSP 110b). The requirements and all the options are listed below. Students are encouraged to take the four required courses early in their pursuit of the major, but may take electives concurrently as well. Students interested in majoring or minoring in HSSP should make an appointment with the program chair to declare their major and be assigned an adviser. Those interested in lab experience and senior research should contact prospective mentors about these opportunities.

#### Faculty (Executive Committee)

**Peter Conrad, Chair**  
(Sociology)

**Sarita Bhalotra, Associate Chair**  
(Heller School)

**Sarah Lamb**  
(Anthropology)

**Walter Leutz**  
(Heller School)

**James Morris**  
(Biology)

**Sacha Nelson**  
(Biology)

**Sara Shostak**  
(Sociology)

**Judith Tsipis**  
(Biology)

### Requirements for the Minor

To complete the minor, students must complete the four required courses as noted in part A below: BIOL 15b or BIO 22b; SOC 191a; HS 104b\*; HSSP 100b) and two additional elective courses from different "focal areas" listed below for a total of six courses.

\* LGLS 114a can be substituted for HS 104b.

### Requirements for the Major

**A.** All students are required to complete four core courses plus a hands-on experience, a senior seminar, and elective requirements which vary for the BA and the BS degrees. The core courses are: SOC 191a, HS 104b, HSSP 100b, and one of three biology courses: BIOL 15b, BIOL 22b, or BIOL 42a. All students working toward a BS degree must take BIOL 42a as a core biology course. To fulfill the hands-on experience requirement, students must complete either HSSP 89a, HSSP 98a or b, HSSP 99d, or WMGS 92a. HSSP 100a is the capstone course, generally taken in the senior year. LGLS 114a may be substituted for HS 104b.

Students must choose one of the two tracks described below—Option I leading to the BA in HSSP or Option II leading to the BS in HSSP.

Among courses offered to fulfill the requirements for this major, no course may be taken pass/fail and all grades in major courses must be at least a C-.

Students may, with approval from the HSSP chair, transfer up to two courses (eight credits) taken from outside Brandeis for the major, petitioning to use them as either core courses or electives.

**Option I: The BA Degree in HSSP**

Students wishing to obtain a Bachelor of Arts degree must complete all the requirements listed in part A above, plus four elective courses, including one each from “focal areas” A, B, and C. The BA option requires ten courses to complete.

**Option II: The BS Degree in HSSP**

Students wishing to obtain a Bachelor of Science degree must complete all the requirements listed in part A above, plus five electives from focal areas A, B, and C (from the lists below, three of them being from focal area A); and twenty-four course credits of additional science or math electives at or above the 10-level. Students must also enroll in all laboratories that accompany electives used to satisfy these requirements (i.e., BIOL 18a must be taken with BIOL 22a) and will count as half course (2 credits) toward the six science courses (twenty-four credits) higher than the 10-level required for the BS.

PYSC 51a or MATH<sup>®</sup>10b may count as one of the six additional basic math/science courses.

**B. Honors Program**

In order to enroll for honors courses, a student must have a 3.25 overall GPA or a 3.5 GPA from a minimum of five HSSP electives and three HSSP core courses. Students wishing to graduate with honors in HSSP will be required to take HSSP 99d for which the formation of a three-faculty member committee and a formal defense before that committee is required. The committee will consist of the student’s adviser, as well as two members decided upon by the student and the adviser, and must be approved by the chair of HSSP.

**Courses of Instruction****(1–99) Primarily for Undergraduate Students****HSSP 89a Internship and Analysis**

*Prerequisite: Open only to HSSP majors.*  
A supervised internship in a health care or policy organization. Internship placement must be approved by the HSSP internship instructor and should focus on some aspect of health and public service. This could include work in a department of public health, hospital or health care agency, health advocacy organization, or other appropriate government or private-sector organization. Students are required to attend a biweekly internship course and submit a twenty- to twenty-five-page research paper relating to their internship. Usually offered every year.  
Ms. Gonsalves

**HSSP 92a Internship and Analysis**

Staff

**HSSP 98a Independent Research in Health: Science, Society, and Policy**

Under the direction of a member of the HSSP faculty or faculty sponsor approved by HSSP chair, students conduct an intensive laboratory- or field-based project that culminates in a twenty- to twenty-five-page research paper. Usually offered every year.  
Staff

**HSSP 98b Readings in Health: Science, Society, and Policy**

Under the direction of a member of the HSSP faculty, students conduct a semester-long, original, health-related research project (laboratory- or field-based) and write a twenty- to twenty-five-page paper. Usually offered every year.  
Staff

**HSSP 99d Senior Research**

Under the direction of a member of the HSSP faculty, students conduct a year-long, original, health-related research project (laboratory- or field-based) and write a thesis.  
Staff

**Special Notes Relating to Undergraduates Interested in Premedical Studies**

The HSSP major is not meant to fulfill premedical requirements, but HSSP students could satisfy the prerequisites for medical school in one of two ways: (1) by majoring in one of the life or physical sciences and choosing HSSP as a minor, or (2) by majoring in HSSP and selecting the BS option of HSSP. To assess their options, premed students should consult the Web site [www.brandeis.edu/as/prehealth/](http://www.brandeis.edu/as/prehealth/).

**(100–199) For Both Undergraduate and Graduate Students****HSSP 100b Introduction to Epidemiology, Biostatistics, and Population Health**

[ qr ss ]

*Core course for the HSSP major and minor.*  
Provides an orientation to the science of epidemiology, the quantitative foundation for public health policy. As a comprehensive survey course, students from varying academic backgrounds are introduced to biostatistics and major epidemiological concepts, and provided with training in their application to the study of health and disease in human populations. Case studies examine how environmental, physical, behavioral, psychological, and social factors contribute to the disease burden of populations. Usually offered every year.  
Ms. Goodman

**HSSP 102a Global Perspectives on Health**

[ ss ]

A primer on major issues in health care in developing nations. Topics include the natural history of disease and levels of prevention; epidemiological transitions; health disparities; and determinants of health including culture, social context, and behavior. Also covers: infectious and chronic disease incidence and prevalence; the role of nutrition, education, reproductive trends, and poverty; demographic transition including aging and urbanization; the structure and financing of health systems; and the globalization of health. Usually offered every year.

Ms. Bhalotra

**HSSP 104b Health Economics**

[ ss ]

*Prerequisite: ECON 2a.*

Emphasizes the concepts and tools of health economics applicable to both developed and developing countries. Topics include: cost-benefit and cost-effectiveness analysis, the demand for health services, insurance and risk, managed care, provider reimbursement, national health insurance, and an overview of health care systems in other countries. Usually offered every second year.

Mr. Hodgkin

**HSSP 106a Managing Medicine**

[ ss ]

*Prerequisite: HS 104b or LGLS 114a.*

Overview of the principles of management within health-care organizations. Through case studies of real hospitals, insurers, and firms, the class examines choices of clinicians and managers aimed at improving quality, containing costs, driving technology adoption, or promoting new ventures. Usually offered every second year.

Mr. Zinner

**HSSP 107b Innovation in Health Care: Risks and Rewards**

[ ss ]

*Prerequisite: HS 104b or permission of the instructor. Priority given to HSSP majors and minors.*

An overview of the role of medical technology in the U.S. health care system, with a focus on the impact of prescription drugs on the health care system, their promise for the future, and inherent risks. Usually offered every year.

Ms. Thomas

**HSSP 110a Integrative Seminar on Health**

[ ss ]

*Prerequisite: Senior status in the HSSP major.*

The capstone course is designed to bring all HSSP seniors together to integrate their academic course work and fieldwork/laboratory experiences across a range of health-related disciplines. Each year the course focuses on a single issue that lends itself to examination from a variety of perspectives. Topics vary from year to year at the discretion of the faculty who teach the course. Refer to the *Schedule of Classes* for specific topics. Course is usually team-taught by faculty in different disciplines.

Usually offered every year.

Mr. Conrad and Ms. Lamb

**HSSP 112b Public Health Perspectives on Child Well-Being**

[ ss ]

*Enrollment limited to junior and senior HSSP majors, and others by permission of the instructor.*

Provides students with information about the health of children and their families from a public health perspective. Usually offered every year.

Ms. Klerman

**HSSP 114b Racial/Ethnic and Gender Inequalities in Health and Health Care**

[ ss ]

An examination of the epidemiological patterns of health status by race/ethnicity, gender, and socio-economic status. Addresses current theories and critiques explaining disparities in health status, access, quality, and conceptual models, frameworks, and interventions for eliminating inequalities. Usually offered every second year.

Ms. Jefferson

**HSSP 192b Sociology of Disability**

[ ss ]

In the latter half of the twentieth century, disability has emerged as an important social-political-economic-medical issue, with its own distinct history, characterized as a shift from "good will to civil rights." Traces that history and the way people with disabilities are seen and unseen, and see themselves. Usually offered every year.

Mr. Gullely

**Core Courses****BIOL 15b**

Biology: Human Implications

**HS 104b**

American Health Care

**HSSP 100b**

Introduction to Epidemiology, Biostatistics, and Population Health

**HSSP 110a**

Integrative Seminar on Health

**SOC 191a**

Health, Community, and Society

**Electives**

The following courses are approved for the program. Not all are given in any one year. Please consult the *Schedule of Classes* each semester.

**Focal Area A: Biological Dimensions of Health and Illness****BCSC 1a**

Designer Genes

**BIOL 22a**

Genetics and Molecular Biology

**BIOL 22b**

Cell Structure and Function

**BIOL 42a**

Physiology

**BIOL 43b**

Comparative Vertebrate Anatomy

**BIOL 55b**

Diet and Health

**BIOL 125a**

Immunology

**BIOL 126b**

Protein Structure and Disease

**BIOL 128a**

Human Genetics

**BIOL 132a**

General Microbiology

**BIOL 149b**

Molecular Pharmacology

**BIOL 160b**

Human Reproductive and Developmental Biology

**BIOL 172b**

Growth Control and Cancer

**BISC 2b**

Genes, Culture, History: A Case Study

**BISC 4a**

Heredity

**BISC 4b**  
Food, Nutrition, and Health

**BISC 5a**  
Pathogens and Human Disease

**BISC 5b**  
Diseases of the Mind

**BISC 6b**  
Environmental Health

**BISC 7a**  
The Biology and Culture of Deafness

**NBIO 140b**  
Principles of Neuroscience

**NBIO 145b**  
Systems Neuroscience

**NBIO 146a**  
The Neurobiology of Human Disease

**NBIO 150a**  
Autism and Human Developmental Disorders

**NPSY 199a**  
Human Neuropsychology

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**Focal Area B: Social and Behavioral Dimensions of Health and Illness**

**ANTH 127a**  
Medicine, Body, and Culture

**ANTH 142a**  
AIDS: Science, Society, and Policy

**BISC 2a**  
Human Reproduction, Population Explosion, Global Consequences

**ENG 58b**  
AIDS, Activism, and Representation

**HSSP 114b**  
Racial/Ethnic and Gender Inequalities in Health and Health Care

**PHIL 23b**  
Biomedical Ethics

**PHIL 123b**  
Topics in Biomedical Ethics

**PSYC 33a**  
Developmental Psychology

**PSYC 37a**  
The Psychology of Adult Development and Aging

**PSYC 38a**  
Health Psychology

**PSYC 130b**  
Life Span Development: Middle Adulthood

**PSYC 145b**  
Aging in a Changing World

**PSYC 169b**  
Disorders of Childhood

**SOC 177b**  
Aging in Society

**SOC 189a**  
Sociology of Body and Health

**SOC 190b**  
Caring in the Health Care System

**SOC 193a**  
Environment, Health, and Society

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**Focal Area C: Health Care Policy and Practice**

Undergraduates in the HSSP program may be admitted to the graduate-level courses below (numbered above 200) with the permission of the instructor.

**HS 124a**  
Dilemmas of Long-Term Care

**HS 412b**  
Substance Use and Societal Consequences

**HS 518a**  
Management of Health Care Organizations

**HS 519a**  
Health Economics

**HS 520a**  
Payment and Financing of Health Care

**HS 521a**  
Political and Organizational Analysis in Health Policy

**HSSP 102a**  
Global Perspectives on Health

**HSSP 104b**  
Health Economics

**HSSP 106a**  
Managing Medicine

**HSSP 107b**  
Innovation in Health Care: Risks and Rewards

**HSSP 112b**  
Public Health Perspectives on Child Well-Being

**HSSP 192b**  
Sociology of Disability

**LGLS 114a**  
American Health Care: Law and Policy

**LGLS 121b**  
Law and Social Welfare: Citizen Rights and Government Responsibilities

**LGLS 129b**  
Law, Technology, and Innovation

**LGLS 131b**  
Patient Autonomy: Law, Medicine, and Ethics

**LGLS 132b**  
Environmental Law and Policy

**LGLS 138b**  
Science on Trial

**SOC 176a**  
Nature, Nurture, and Public Policy

**WMGS 106b**  
Women in the Health Care System

**WMGS 136a**  
Gender, Race, and Science