Health & Human Biology Sample Theme Courses

This document provides a list of courses that recent HHB concentrators have used to fulfill the various theme and two related elective requirements.

The courses listed here are only examples; you are not restricted to choosing from this list.

Courses listed may not be offered every year. It is up to the student to develop a cohesive grouping of four theme courses that offer depth of learning in the area of interest. Students may find other courses of interest and should discuss these with the concentration advisor in choosing a cohesive grouping for the theme. Students should strive to articulate how the four selected theme courses complement and supplement one another in a clear way.

Brain Health & Behavior

The Brain Health and Behavior theme provides a framework for understanding how brain activity drives behavioral actions that in turn influence health and well-being. Brain function can be examined from a neuroanatomical, neurodevelopmental, neurochemical and/or a neurophysiological perspective. Students pursuing the Brain Health and Behavior theme have interests ranging from traumatic brain injury to nervous system and behavior disorders. They draw on courses from many departments including CLPS, Education, and Sociology and often pursue research with faculty in Brown's Institute for Brain Science.

Example Theme Courses (not all may be offered every semester)

<table>
<thead>
<tr>
<th>CLPS</th>
<th>0110: Mechanisms of Animal Behavior</th>
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<tbody>
<tr>
<td>CLPS</td>
<td>0200: Human Cognition</td>
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<tr>
<td>CLPS</td>
<td>0220: Making Decisions</td>
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<td>CLPS</td>
<td>0400: Brain Damage and the Mind</td>
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<td>CLPS</td>
<td>0500: Perception and Mind</td>
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<td>CLPS</td>
<td>0510: Perception, Illusion, and the Visual Arts</td>
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<td>CLPS</td>
<td>0610: Children's Thinking</td>
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<td>CLPS</td>
<td>0701: Personality</td>
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<td>CLPS</td>
<td>1150: Memory and the Brain</td>
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<td>CLPS</td>
<td>1193: Laboratory in Genes and Behavior</td>
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<td>CLPS</td>
<td>1290: Laboratory in Cognitive Processes</td>
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<td>CLPS</td>
<td>1291: Computational Cognitive Science</td>
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<td>CLPS</td>
<td>1400: The Neural Basis of Cognition</td>
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<td>CLPS</td>
<td>1490: Functional Magnetic Resonance Imaging: Theory and Practice</td>
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<td>CLPS</td>
<td>1492: Computational Cognitive Neuroscience</td>
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<td>CLPS</td>
<td>1510: Psychology of Hearing</td>
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<td>CLPS</td>
<td>1610: Cognitive Development</td>
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<td>CLPS</td>
<td>1650: Child Language Acquisition</td>
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<td>CLPS</td>
<td>1700: Abnormal Psychology</td>
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<td>CLPS</td>
<td>1790: Personality and Clinical Assessment</td>
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<td>ANTH</td>
<td>0200: Culture and Human Behavior</td>
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<td>ANTH</td>
<td>0300: Culture and Health</td>
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<td>ANTH</td>
<td>1300: Anthropology of Addiction &amp; Recovery</td>
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<td>ANTH</td>
<td>1880: From Magic Mushrooms to Big Pharma</td>
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<td>EDUC</td>
<td>0800 Human Development</td>
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<tr>
<td>EDUC</td>
<td>1270: Adolescent Psychology</td>
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<td>EDUC</td>
<td>1710: History &amp; Theories of Child Dev.</td>
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<td>PHIL</td>
<td>0020: Mind and Matter</td>
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<td>PHIL</td>
<td>1520: Consciousness</td>
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<tr>
<td>SOC</td>
<td>1440: Intimate Violence</td>
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</tbody>
</table>
Sample Biology Electives (related to theme - not all may be offered every semester)

NEUR 0010: The Brain: An Introduction to Neuroscience
NEUR 0700: Psychoactive Drugs and Society
NEUR 1020: Principles of Neurobiology
NEUR 1030: Neural Systems
NEUR 1040: Introduction to Neurogenetics
NEUR 1440: Neural Dynamics
NEUR 1540: Neurobiology of Learning and Memory
NEUR 1600: Experimental Neurobiology
NEUR 1650: Structure of the Nervous System
NEUR 1670: Neuropharmacology and Synaptic Transmission
NEUR 1680: Computational Neuroscience

NEUR 1740: The Diseased Brain: Mechanisms of Neurological and Psychiatric Disorders
NEUR 1930/1940 Series: Seminars
ENVS 0490: Environmental Science in a Changing World
BIOL 1310: Developmental Biology
BIOL 0320: Vertebrate Embryology
BIOL 0400: Biological Design: Structural Architecture of Organisms
BIOL 0420: Principles of Ecology
BIOL 0470: Genetics
BIOL 0480: Evolutionary Biology
BIOL 0280: Biochemistry
BIOL 0500: Cell and Molecular Biology
BIOL 0800: Principles of Physiology
BIOL 1100: Cell Physiology and Biophysics
BIOL 1190: Synaptic Transmission and Plasticity

Environmental Health

Environmental Health is concerned with the biological, chemical and physical factors that reduce the quality and length of life for humans. Environmental factors that influence health and well-being are diverse, far reaching, and often intertwined with sociocultural factors. Students pursuing the Environmental Health theme are interested in the health implications of toxicants in natural systems and the built environment, natural disaster, climate change, the loss of biological diversity and ecosystem function, and more. Many students simultaneously explore the social dimensions of environmental health from sustainable and equitable development perspectives. HHB Environmental Health concentrators often take courses with faculty associated with the new Institute at Brown for Environment and Society.

Example Theme Courses (not all may be offered every semester)

GEOL 0030: Climate and Climate Change
GEOL 1320: Intro to GIS for Environmental Applications
GEOL 1370: Environmental Geochemistry
PLCY 2555: Environmental Policy, From the Ground Up
ENVS 0110: Humans, Nature and the Environment
ENVS 0490: Environmental Science in a Changing World
ENVS 1355: Environmental Issues in Development Economics
ENVS 0130: The Engineer’s Burden: Why Changing the World Is Difficult

Sample Biology Electives (related to theme - not all may be offered every semester)

BIOL 0210: Diversity of Life
BIOL 0485: Conservation Biology
BIOL 1485: Climate Change, Health and Ecology
BIOL 0415: Microbes in the Environment
BIOL 0420: Principles of Ecology
BIOL 1310: Developmental Biology
BIOL 1820: Environmental Health and Disease
Global/International Health

*Global/International Health* is the study, research and application of practices that prioritize health equity for all people worldwide. Global Health draws on many disciplines within and beyond the health sciences including sociology, anthropology, international relations, and economics. A thematic focus in Global Health allows students to address emerging diseases, vaccine development and delivery, and the economic factors that impact the diagnosis, prevention, surveillance and treatment of disease. Students studying Global/International Health enroll in a number of courses offered by the School of Public Health and learn from faculty involved in Brown's Global Health Initiative.

**Example Theme Courses (not all may be offered every semester)**

- **GEOL 0030**: Climate and Climate Change
- **GEOL 1320**: Intro to GIS for Environmental Applications
- **GEOL 1370**: Environmental Geochemistry
- **ENVS 0110**: Humans, Nature and the Environment
- **ENVS 0490**: Environmental Science in a Changing World
- **ENVS 1355**: Environmental Issues in Development Economics
- **ENVS 0130**: The Engineer’s Burden: Why Changing the World Is Difficult
- **PHP 1070**: Burden of Disease
- **ANTH 0110**: Anthropology and Global Social Problems
- **ANTH 0300**: Culture and Health
- **ANTH 1020**: AIDS in Global Perspective
- **ANTH 1255**: Anthropology of Disasters
- **SOC 1620**: Globalization and Social Conflict
- **SOC 1340**: Principles and Methods of GIS

**Sample Biology Electives (related to theme - not all may be offered every semester)**

- **BIOL 1485**: Climate Change, Health and Ecology
- **BIOL 1550**: Biology of Emerging Microbial Disease Diseases
- **BIOL 1820**: Environmental Health and Disease

**Social Context of Health & Disease**

*The Social Context of Health and Disease* theme allows students to study the myriad social, cultural, and historical factors that shape our health and how we prevent and treat disease. Students with interests in topics such as health inequality, the history of medicine, health communication, and the diverse methods of healing benefit from the breadth of opportunities in this theme.

**Example Theme Courses (not all may be offered every semester)**

- **ANTH 0300**: Culture and Health

**Sample Social Sciences Electives (related to theme - not all may be offered every semester)**

- **GNSS 1960B**: Health and Healing in American History
- **GNSS 1960C**: Gender, Sexuality and Science
- **GNSS 090C**: Reproductive Health
- **HIST 1180**: The Rise of the Scientific Worldview
- **HIST 1190**: 19th Century Roots of Modern Medicine
HIST 1490: History of Medicine I: Medical Traditions in the Old World Before 1700
HIST 1491: The Development of Scientific Medicine in Europe and the World
HIST 1971T: Knowing & Believing: Galileo to Darwin
HIST 1978C: Health and Healing in the Colonial and Post-Colonial Africa
PHP 1070: Burden of Disease in Developing Countries
PHP 0310: Health Care in the United States
PHP 1680I: Pathology to Power: Disability, Health and Community
PHP 1740: Principles of Health Behavior & Health
Biol 1560: Virology PHP
PHP 1520: Promotion Intervention Emergency Medicine Systems
PHP 2380: Health Communication
Soc 1550: Sociology of Medicine
Biol 0920A: Controversies in Medicine
Biol 1920A: Imperialism and Public Health

Biol 1920B: Health Inequality in Historical Perspective
Biol 1920C: Social Contexts of Disease
Biol 1920D: Race, Difference and Biomedicine: Historical Considerations
Clps 0701: Personality
Scso 1550D: Biomedicalization: The Body as a Social Problem

Sample Biology Electives

Biol 1550: Emerging Disease
Biol 1520: Innate Immunity
Biol 0530: Immunology
Biol 0170: Biotechnology and Medicine
Biol 0470: Genetics
Biol 1120: Biomaterials
Biol 1290: Cancer Biology