

# HHB Sample Course Plans

This document provides sample academic plans developed by recent HHB concentrators to fulfill the theme and related elective requirements. These plans include combinations of theme courses and biology electives that work together to form a coherent area of focus, with a cumulative capstone. The courses listed are illustrative only—you are not limited to these options, and not all courses are offered every year.

Students are expected to propose a thoughtful and cohesive grouping of four theme courses that demonstrate depth in a particular area of interest. Equally important is the selection of biology electives that enhance and complement the chosen theme. Together, these courses should form an integrated plan that reflects the student's academic and professional goals.

You are encouraged to identify courses that align with your interests and to consult your concentration advisor to refine your course of study. A strong theme plan will clearly articulate how the selected courses—both themes, biology electives, and capstone—intersect and reinforce each other to build expertise in a meaningful area of human health and biology.

Sample plans for each HHB theme:

## **Mind, Brain & Behavior**

*Mind, Brain, Behavior* encompasses the study of causes and consequences of brain and behavioral health wellness through the lens of myriad fields including contemplative studies, education, cognitive science and more. Examples of specific interests relevant to this theme include young adult development, traumatic brain injury, addiction, nervous system disorders, mental health, mindfulness, cognitive wellness, and more. Departments offering relevant coursework include but are not limited to CPSY, Education, Contemplative Studies, Public Health, and Sociology. Many students who pursue capstones and research do so with faculty from within the Division of Biology and Medicine as well as The Carney Institute for Brain Science, but experiences with non-BioMed faculty are common, as well.

### **Sample 1**

- Bio elect 1: NEUR 0010 (The Brain: An Introduction to Neuroscience)
- Bio elect 2: NEUR 1020 (Principles of Neurobiology)
- Theme 1: CPSY 0700 (Social Psychology)
- Theme 2: CPSY 0702 (Intro to Clinical Psychology)
- Theme 3: COST 1082 (Me, Myself, and I: Exploring Senses of Self from a Multidisciplinary Perspective)
- Theme 4: PHIL 1770 (Philosophy of Mind)
- Capstone: CPSY 1741 (Social Brain in Context: From Neuroeconomics to Political Polarization)

### **Sample 2**

- Bio elect 1: BIOL 0800 (Principles of Physiology)
- Bio elect 2: BIOL 1260 (Physiological Pharmacology)
- Theme 1: ANTH 0530 (Archaeology of Psychoactive Substances)
- Theme 2: ANTH 1300 (Anthropology of Addictions and Recovery)
- Theme 3: CPSY 1700 (Abnormal Psychology)
- Theme 4: PHP 1880 (Meditation, Mindfulness and Health)
- Capstone: PHP 1890 (The Craving Mind)

## **Planetary Health**

*Planetary Health* is a multidisciplinary field that focuses on the human health impacts of human-caused disruptions of Earth's natural systems. Students studying planetary health might focus on the health and wellness implications of climate change, global trade/travel and species invasions, land-use change, the loss of biological diversity and ecosystem function. Because environmental factors that influence health and wellbeing are often intertwined with sociocultural factors, many students simultaneously explore the social dimensions of environmental health from sustainable and equitable development perspectives. Biology, Public Health, and the Institute at Brown for Environment and Society (IBES) are examples of departments whose faculty offer relevant coursework and support undergraduate research.

### **Sample 1**

- Bio elect 1:* BIOL 0420 (Principles of Ecology)
- Bio elect 2:* BIOL 1470 (Conservation Biology)
- Theme 1:* ENVS 0490 (Environmental Science in a Changing World)
- Theme 2:* ENVS 1615 (Climate Change, Human Rights, and the Policy Process)

- Theme 3:* PHP 0720 (Public Health and the Environment)  
*Theme 4:* PHP 1580 (Pandemic Game Changers: Preparing the Next Generation of Decision-Makers for Emerging Bio Threats)  
*Capstone:* BIOL 1455 (Planetary Health: Global Environmental Change and Emerging Infectious Disease)

### **Sample 2**

- Bio elect 1:* BIOL 0500 (Cell and Molecular Biology)  
*Bio elect 2:* BIOL 1820 (Environmental Health and Disease)  
*Theme 1:* AMST 1904K (Power + Water: Material Culture and its Environmental Impact)  
*Theme 2:* ENGN 1931R (The Chemistry of Environmental Pollution)  
*Theme 3:* EDUC 0120 (K-12 Education Systems and Climate Change)  
*Theme 4:* PHP 1725 (Rural Public Health)  
*Capstone:* PHP 1700 (Current Topics in Environmental Health)

### **Global Health**

*Global Health* is a collaborative and transnational approach to improving health and achieving health equity for all people worldwide. Global Health draws on many disciplines within the health sciences, sociology, anthropology, international relations, and economics. Students who pursue this theme might study prevention and control of global pandemics, transnational differences in vaccine development and delivery, and the economic factors that impact the diagnosis, prevention, surveillance and treatment of communicable and noncommunicable disease. The School of Public Health, BioMed, Brown's Global Health Initiative, and the Institute at Brown for Environment and Society (IBES) are examples of the affiliations of faculty who support coursework and research relevant to this theme.

### **Sample 1**

- Bio elect 1:* BIOL 0170 (Biotechnology and Medicine)  
*Bio elect 2:* BIOL 1070 (Biotechnology and Global Health)  
*Theme 1:* PHP 1070 (Global Burden of Disease)  
*Theme 2:* PHP 1100 (Comparative Health Care Systems)  
*Theme 3:* POLS 0400 (Introduction to International Politics)  
*Theme 4:* SOC 1490 (Power, Knowledge and Justice in Global Social Change)  
*Capstone:* ANTH 1310 (Global Health: Anthropological Perspectives)

### **Sample 2**

Bio elect 1: BIOL 0510 (Microbiology)

Bio elect 2: BIOL 1855 (Tropical Medicine & Neglected Tropical Diseases)

Theme 1: ANTH 300 (Culture and Health)

Theme 2: HIAA 1171 (Cities, Landscapes, and Design in the Age of  
Pandemics)

Theme 3: PHP 0060 (Complexities and Challenges of Global Health)

Theme 4: PHP 0700 (Global Public Health Interventions)

Capstone: BIOL 1945 (Outbreaks and Infections)

### **Social Context of Health and Disease**

The Social Determinants of Health encompasses both qualitative and quantitative examination of social factors and their influence on health outcomes. These influences can be exerted at levels ranging from individual and family circumstances to societal factors such as economic policies, social norms, and political systems. The history of medicine, health communication, and alternative approaches to healing are examples of a few additional areas of study applicable to this theme.

### **Sample 1**

Bio elect 1: BIOL 0530 (Principles of Immunology)

Bio elect 2: BIOL 1600 (Vaccines)

Theme 1: AMST 0601 (Health and Healing in American History)

Theme 2: ANTH 0300 (Culture and Health)

Theme 3: HIST 1977I (Gender, Race and Medicine in the Americas)

Theme 4: PHP 1460 (Public Health in a Changing World: Law, Policy & Justice)

Capstone: PHP 1920 (Social Determinants of Health)

### **Sample 2**

Bio elect 1: BIOL 0500 (Cell and Molecular Biology)

Bio elect 2: BIOL 1330 (Biology of Reproduction)

Theme 1: APMA 1910 (Race and Gender in the Scientific Community)

Theme 2: GNSS 0120 (Introduction to Gender and Sexuality Studies)

Theme 3: HIST 1976U (Planning the Family)

Theme 4: STS 1700T (Race, Gender, and Technology in Everyday Life)

Capstone: PHP 1861 (Reproductive Health, Rights and Justice)