Concentrating in Human Biology, Behavior, and Evolution





Click here for an advising appointment with Dr. Yegian

HBBE Student Club



Ellie



Jiajia

Co-Presidents, '25-'26

Human Biology, Behavior, and Evolution (HBBE) is a life sciences concentration that unites all aspects of human biology and ecology to understand humans as an organism and as a species.

The pathway for each HBBE student is unique. We aim to provide our students the foundation to explore their own interests in human biology using the HBBE framework of evolutionary theory. Three guiding principles of the HBBE concentration are:

- **exploration**
- **integration**
- **flexibility**

HBBE serves as a nexus for all questions related to humans, and can be combined with social sciences in a secondary or joint concentration.

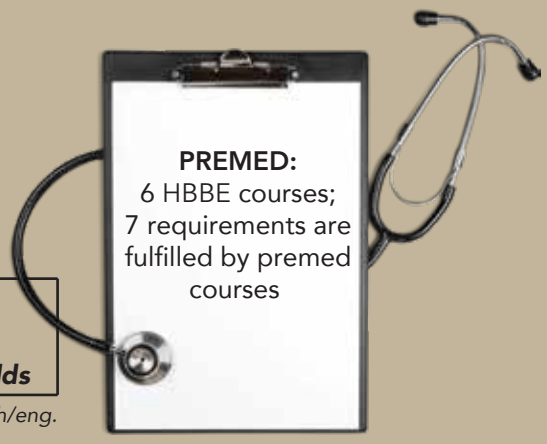
Course Requirements

1 2 3 ***Foundational***
LS1a, LS1b, HEB 10

4 5 6 ***Introductory***
HEB 10 - HEB 89
LS2, GE 1027, GE 1056

7 8 9 ***Interm./Adv.***
HEB 100 - HEB 199

10 11 12 13 ***Related Fields***
any science/math/eng.



Typical Research Timeline

SO *Explore your interests via classes; volunteer or start a project in a lab to try new things*

JR *Decide which research area you are most interested in; take a research seminar to help decide.*

SR *Complete an honors thesis project under the guidance of a research advisor.*

RESEARCH IN HBBE

Human Biology, Behavior, & Evolution

Clinical Labs

Work with clinicians from Harvard Medical School or other institutions to study questions related to medicine or public health.

Faculty Labs

Work with faculty in the HEB department or other departments/schools to study any aspect of human biology, behavior, or evolution.

HBBE students use evolutionary theory to relate their research to humans as an organism and species.

Theory/Review

Develop and test new ideas by integrating data and knowledge from the literature.

Field Work

Conduct research in local human communities, wild primate ecosystems, paleontological dig sites, and more.

HBBE Kenya Summer Field School CLICK HERE

Click to learn more about HBBE faculty research:


Prof. Capellini

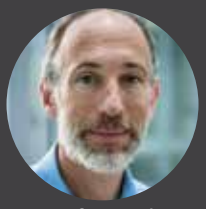

Prof. Carmody


Prof. Hecht


Prof. Henrich


Prof. Kuzawa


Prof. Lieberman


Prof. Reich


Prof. Song


Prof. Surbeck


Prof. Uno


Prof. Warriner


Dr. Yegian

HBBE students often partner with research advisors outside of Harvard College:

Mass General Brigham

Boston Children's

Massachusetts Institute of Technology

Tufts University

Dana-Farber Cancer Institute

BROAD INSTITUTE

EXAMPLE HBBE THESES

These Hips Don't Lie : A Comparative Study on Evolutionary Pelvic Development In Utero in Mus musculus and Homo sapiens
Serena Fernandopulle, '24

Novel DNA metabarcoding pipeline to define diet and investigate its relationship with gut microbiome composition in wild chimpanzees (Pan troglodytes)
Molly Chiang, '23

A Tale of Two Mismatches: A Systematic Review and Survey Investigating Physical Activity as a Potential Treatment for Stress and Depression in Harvard College Students
Max Schermer, '24

Who we are together: Interaction, Social Norms and Intergroup Relations in a Post-Apartheid South Africa
Nikita Lledo, '22

A Primatized Mouse Model: A Platform for Assessing Human, Chimpanzee, and Gorilla Gut Microbiomes
Caroline Diggins, '20

A Bioinspired Approach to Fertility Preservation : Evolved Adaptations in an East African Rodent Could Protect Pediatric Cancer Patients from Infertility
Kathryn Stevens, '25

An Investigation into Metabolic Compensation and the Relationship between Active Energy Expenditure and Resting Metabolic Rate
Elizabeth Pachus, '23

Human Biology, Behavior, and Evolution
Requirements Worksheet

Name	Class Year

		Course		Term/Year	Options:
Foundation Courses 4 Courses	1	Life Sciences 1a or LPSa or LS 50a			Required
	2	Life Sciences 1b or LS 50b			Required
	3	HEB 10 - The Biology of Human Health			Required
	4	Research Seminar			HEB 100 - HEB 129 or HEB 91r
Intro Courses & Electives 5 courses Three of the five courses must fulfill distribution requirements via specific courses in each of the areas listed.	1	**Evolution**			HEB 45, HEB 58, GenEd 1027
	2	**Anatomy/ Physiology**			LS2, HEB 50, HEB 55
	3	**Behavior**			HEB 30, HEB 39, GenEd 1056
	4	**2 HEB Electives**			Any course from the HEB 100+
	5				
Related Fields: 4 courses These courses allow you to further explore your interests within the sciences.	1				**Choose from:** HEB Archaeology Biomedical Engineering Chemistry and Physical Biology Chemistry (including Physical Sciences 1) Human Developmental and Regenerative Biology (SCRB) Molecular and Cellular Biology Neurobiology Organismic and Evolutionary Biology Math Physics (including Physical Sciences 2 and 3) Statistics/BioStats Computer Science Mind, Brain, and Behavior **Approved** Psychology courses **Approved** History of Science courses **Approved** Global Health and Health Policy **Approved** Science of the Living Systems or Science of the Physical Universe courses (Limit: one course)
	2				
	3				
	4				
Optional Honors requirements See Honors Guide on LS website for more info.	1				**Thesis Honors**: HEB 99a & 99b, both semesters of Senior year **Non-Thesis Honors**: Two approved upper-level courses
	2				

Human Biology, Behavior and Evolution
Mind/Brain/Behavior Track
Requirements Worksheet

Name	Class Year

		Course	Term/Year	Options:
Foundation Courses 5 Courses	1	PSY 1 or Gen Ed 1056		Required
	2	Neuro 80		Required
	3	Life Sciences 1b or LS 50b		Required
	4	HEB 10 - The Biology of Human Health		Required
	5	Research Seminar		HEB 100-129; see also the MBB 90-series of Junior Interdisciplinary Seminars
Subfield Courses & Electives 3 courses	1	Evolution		HEB 45, HEB 58, GenEd 1027
	2	HEB Elective		Any course from the HEB Course List
	3	HEB Elective		
MBB Courses 2 courses	1			MBB-approved courses (see Student Handbook)
	2			
Related Fields 3 courses These courses allow you to further explore your interests within the sciences.	1			Courses chosen from fields indicated on "HEB Related Fields Course"
	2			
	3			
Thesis 2 courses See Honors Guide on LS website for more info.	1	HEB 99a		Required Thesis Courses: HEB 99a & 99b, both semesters of Senior year
	2	HEB 99b		