

# AS.290 (BEHAVIORAL BIOLOGY)

## Courses

### AS.290.101. Human Origins. 3 Credits.

This course examines the origins of human structure, function and behavior from an evolutionary perspective. It includes study of the evolution, behavior and behavioral ecology of nonhuman primates, hominid evolution (including the paleontological and archaeological records), and the origins of human cognition, social behavior and culture.

Distribution Area: Natural Sciences, Social and Behavioral Sciences

AS Foundational Abilities: Science and Data (FA2)

EN Foundational Abilities: Engagement with Society (FA4)

### AS.290.303. Animal Behavior and Communication Lab. 3 Credits.

This course examines animal behavior and more specifically animal communication in all modalities (especially sound, sight, and scent). Students will learn how to design experiments, analyze results and write scientific papers in publication form. Students will work on one class experiment for their first paper and then design and conduct their own experiment for their second paper. The course is held in a computer laboratory and on some occasions at "field" locations on or adjacent to campus.

**Prerequisite(s):** AS.200.208 OR AS.200.344

Distribution Area: Natural Sciences, Social and Behavioral Sciences

AS Foundational Abilities: Writing and Communication (FA1), Science and Data (FA2), Projects and Methods (FA6)

Writing Intensive

### AS.290.304. Comparative Neuroanatomy. 3 Credits.

This course examines the phylogenetic and developmental history of the central nervous system across the vertebrate tree of life, with emphasis on the deep history of those features that characterize the human brain. We will study how our understanding of non-human vertebrates (both model and non-model organisms) can provide important insights into the structure and function of the modern human brain.

**Prerequisite(s):** AS.080.306 OR AS.200.141

Distribution Area: Natural Sciences

AS Foundational Abilities: Science and Data (FA2)

### AS.290.305. Experiential Research Lab - Utila Island: Neotropical Ecology, Behavior, and Conservation. 3 Credits.

Tropical ecosystems are immensely diverse in organisms and behaviors. This course will comprise an in-class component fall semester (1 day @ 1.25 hours per week) and then a 13-day component on site at Utila Island, Honduras to experience and research tropical ecosystems and organisms. We will have lectures and preparatory activities at Hopkins on tropical ecology, behavior, island biogeography and conservation. In Utila, we will have group field excursions that will exemplify course concepts and practices. Students will also conduct field research, analyze data and write a research paper on their taxa of focus under the supervision of Utila biologists and program faculty. At the end of this course you will have gained first-hand experience in field research, ethology, and ecology. This course requires travel in early January (intersession). The costs of the trip are included for all students with no fees required. Admission will be through instructor permission. Note this class can count towards a Behavioral Biology upper level course or to satisfy research credit.

**Prerequisite(s):** AS.200.208

Distribution Area: Natural Sciences

AS Foundational Abilities: Writing and Communication (FA1), Science and Data (FA2)

Writing Intensive

### AS.290.306. Behavioral Evolution Lab. 3 Credits.

This computer lab-based class will provide an opportunity for hands-on learning of modern phylogenetic methods for studying behavioral evolution. Students will become familiar with current systematic theory, how to formulate hypotheses using evolutionary trees, and the techniques used to test these hypotheses. Much of the class will be devoted to analyzing their own behavioral dataset and culminate in a final presentation of their findings.

Distribution Area: Natural Sciences, Social and Behavioral Sciences

AS Foundational Abilities: Writing and Communication (FA1), Science and Data (FA2), Projects and Methods (FA6)

Writing Intensive

### AS.290.307. Evolution & Human Behavior. 3 Credits.

The course examines human behavior from an evolutionary perspective. Lectures and seminar-based discussion of the primary literature will cover some of the major approaches and areas of study within the fields of (1) evolutionary anthropology, (2) evolutionary psychology, (3) human behavioral ecology, and (4) evolutionary medicine.

**Prerequisite(s):** AS.290.101 OR AS.200.208

Distribution Area: Natural Sciences, Social and Behavioral Sciences

AS Foundational Abilities: Science and Data (FA2)

EN Foundational Abilities: Engagement with Society (FA4)

### AS.290.330. Human Sexuality. 3 Credits.

Course focuses on sexual development, sexuality across the lifespan, gender identity, sexual attraction and arousal, sexually transmitted disease, and the history of commercial sex workers and pornography. Please note that the use of electronic devices is not permitted during this class, in order to promote the full interactive potential of this engaging seminar-style offering. Open to Juniors & Seniors within the following majors/minors: Behavioral Biology; Biology; Cognitive Science; Medicine, Science & the Humanities; Molecular & Cellular Bio; Neuroscience; Psychological & Brain Sciences; Public Health; Sociology; Study of Women, Gender, & Sexuality.

Distribution Area: Natural Sciences, Social and Behavioral Sciences

AS Foundational Abilities: Science and Data (FA2), Citizens and Society (FA4)

EN Foundational Abilities: Engagement with Society (FA4)

**AS.290.400. Comparative Neural Systems and Behavior Research Discussions. 0.5 Credits.**

This course is required concurrently with research in the Comparative Neural Systems Research and Behavior lab. During the scheduled meetings we will discuss scientific papers, policies and procedures, research ethics and other information related to activities in the lab. At the end of the semester, students will present their research in groups. This course is only open to students doing research in the Neural Systems and Behavior Lab.

AS Foundational Abilities: Science and Data (FA2)

**AS.290.420. Human Sexual Orientation. 3 Credits.**

This course will examine the historical and current theories of sexual orientation and sexual variation development by examining the biological, psychological and social contributing factors that influence the development of sexual orientations and variations along with treatment and modification of problematic sexual behaviors. Priority given to Behavioral Biology majors.

**Prerequisite(s):** Students may receive credit for AS.200.204 or AS.290.330 or AS.290.420, but only ONE can count towards the upper level SOCSCI in Behavioral Biology

Distribution Area: Social and Behavioral Sciences

AS Foundational Abilities: Democracy (FA4.1), Ethics and Foundations (FA5)

EN Foundational Abilities: Engagement with Society (FA4)

**AS.290.450. Undergraduate Teaching Assistant in Behavioral Biology. 1 - 3 Credits.**

Qualified students can serve as undergraduate Teaching Assistants for behavioral biology courses they have already taken at Hopkins (by faculty instructor invitation only). Each individual faculty instructor will determine TA responsibilities based upon departmental policy. Upon invitation, potential Teaching Assistants should forward the instructor invitation to the Director of Undergraduate Studies (Dr. Bohn) and make a request in SIS to add the course using the instructor's section number.

Distribution Area: Social and Behavioral Sciences

AS Foundational Abilities: Science and Data (FA2)

**AS.290.490. Senior Seminar: Behavioral Biology. 1 Credit.**

This course will examine the historical and current theories of sexual orientation and sexual variation development by examining the biological, psychological and social contributing factors that influence the development of sexual orientations and variations along with treatment and modification of problematic sexual behaviors. Priority given to Behavioral Biology majors.

**Prerequisite(s):** AS.290.101 AND AS.200.208 AND AS.200.208 AND AS.200.208, or Instructor permission.;AS.200.141 AND AS.200.208 AND AS.290.101 or instructor permission.:(AS.290.101 AND AS.200.208 AND AS.200.141) or Instructor permission.:(AS.200.141 AND AS.200.208 AND AS.290.101) OR Instructor Permission.

Distribution Area: Social and Behavioral Sciences

AS Foundational Abilities: Science and Data (FA2), Ethics and Foundations (FA5)

**AS.290.495. Connections in Behavioral Biology. 0.5 Credits.**

In this seminar, students discuss the intellectual merit of current or potential future research, internship and outreach activities in Behavioral Biology. This course is designed to 1) expose Behavioral Biology majors to new knowledge in the field, 2) provide the opportunity to develop oral and written communication skills, and 3) build community among students in the major. Students will make oral presentations and write a short paper/news piece or prepare a webpage.

Distribution Area: Natural Sciences, Social and Behavioral Sciences

AS Foundational Abilities: Science and Data (FA2)

**AS.290.501. Behavioral Biology Research - Freshmen. 1 - 3 Credits.**

Students will receive a hands-on experience conducting Behavioral Biology Research with the faculty member listed on this section who must approve your enrollment. In addition to participating in laboratory research students are required to submit a research style paper summarizing their work that is approved by their mentor. Information on the paper, research credits and how to enroll can be found at <https://krieger.jhu.edu/behavioralbiology/research/>. Students working in Dr. Moss's lab must also register for AS.290.400 Comparative Neural Systems and Behavior Research Discussions.

**Prerequisite(s):** You must request Customized Academic Learning using the Customized Academic Learning form found in Student Self-Service: Registration > Online Forms.

AS Foundational Abilities: Science and Data (FA2), Projects and Methods (FA6)

**AS.290.503. Behavioral Biology Research-Behavioral Biology Majors. 1 - 3 Credits.**

Students will receive a hands-on experience conducting Behavioral Biology Research with the faculty member listed on this section who must approve your enrollment. In addition to participating in laboratory research students are required to submit a research style paper summarizing their work that is approved by their mentor. Information on the paper, research credits and how to enroll can be found at <https://krieger.jhu.edu/behavioralbiology/research/>. Students working in Dr. Moss's lab must also register for AS.290.400 Comparative Neural Systems and Behavior Research Discussions.

**Prerequisite(s):** You must request Customized Academic Learning using the Customized Academic Learning form found in Student Self-Service: Registration > Online Forms.

AS Foundational Abilities: Science and Data (FA2), Projects and Methods (FA6)

**AS.290.505. Behavioral Biology DUS Approved Research. 1 - 3 Credits.**

Students will receive a hands-on experience conducting Behavioral Biology Research with a faculty member that does not have a Behavioral Biology research section. Pre-approval by the DUS of Behavioral Biology is required. In addition to participating in laboratory research students are required to submit a research style paper summarizing their work that is approved by their mentor and submitted to the DUS. Information on the paper, research credits and how to enroll can be found at <https://krieger.jhu.edu/behavioralbiology/research/>.

**Prerequisite(s):** You must request Customized Academic Learning using the Customized Academic Learning form found in Student Self-Service: Registration > Online Forms.

AS Foundational Abilities: Science and Data (FA2), Projects and Methods (FA6)

**AS.290.519. Independent Study. 1 - 3 Credits.**

An independent study is when you pursue a topic of special interest within Behavioral Biology. You must initiate the process. The independent study project must be pre-approved by the DUS of Behavioral Biology and must culminate in a substantial research or topic paper submitted to the DUS. For more information visit <https://krieger.jhu.edu/behavioralbiology/research/>.

**Prerequisite(s):** You must request Customized Academic Learning using the Customized Academic Learning form found in Student Self-Service: Registration > Online Forms.

AS Foundational Abilities: Science and Data (FA2), Projects and Methods (FA6)

**AS.290.590. Behavioral Biology Internship. 1 Credit.**

Students who have found a Behavioral Biology related unpaid internship can enroll in this section for up to 1 credit with the DUS of Behavioral Biology pre-approval. Students are required to submit a paper summarizing their internship experience that is approved by their internship mentor and submitted to the DUS. For more information visit <https://krieger.jhu.edu/behavioralbiology/research/>.

**Prerequisite(s):** You must request Customized Academic Learning using the Customized Academic Learning form found in Student Self-Service: Registration > Online Forms.

AS Foundational Abilities: Science and Data (FA2), Projects and Methods (FA6)