

PHYSIOLOGY AND BEHAVIOR OPTION

This option is offered within the following major(s):

- Biology - College of Science (<http://catalog.oregonstate.edu/college-departments/science/school-life-sciences/integrative-biology/biology-bs-hbs>)

The Biology major Physiology and Behavior option is designed to provide a rigorous foundation in the comparative physiology and behavior of animals. Core biological sciences from the Biology major are coupled with course work in behavior, physiology and organismal biology. Undergraduate research or internship experience is strongly recommended for option students, and three credits can be applied to the electives for the option. The Physiology and Behavior option provides excellent preparation for graduate programs in animal behavior, physiology and other areas of organismal biology.

Options in the Biology major require fifteen or fewer additional credits (one term) beyond the basic Biology major, and most students can complete the additional course work in the Physiology and Behavior option in four years. Courses used to satisfy the Physiology and Behavior option requirements also satisfy the Organismal Biology, Physiology, Writing Intensive Course and Upper-division Science Elective requirements for the Biology major.

Students may pursue either the Physiology and Behavior, Pre-Dental, Pre-Medical or Pre-Veterinary Medicine options with the Biology major—no dual combinations are permitted.

It is recommended that Physiology and Behavior option students take PH 201 *GENERAL PHYSICS-PH 203 *GENERAL PHYSICS. It is also recommended that COMM 111 *PUBLIC SPEAKING be used to complete the Biology major Baccalaureate Core communications requirement. Students should also consider taking PSY 202 *GENERAL PSYCHOLOGY, which is optional but required for some of the Psychology elective courses.

For further information, see MyDegrees or the Integrative Biology website at <http://ib.oregonstate.edu>.

Code	Title	Hours
Core		
PSY 201	*GENERAL PSYCHOLOGY	3
BI 319/Z 319	^CRITICAL THINKING AND COMMUNICATION IN THE LIFE SCIENCES	3
Z 350	ANIMAL BEHAVIOR	3
Z 425	EMBRYOLOGY AND DEVELOPMENT	5
Z 431	VERTEBRATE PHYSIOLOGY I	4
Z 432 & Z 442	VERTEBRATE PHYSIOLOGY II and VERTEBRATE PHYSIOLOGY LABORATORY	5
Z 438	BEHAVIORAL NEUROBIOLOGY	3

Organismal Biology

Select one of the following:	4-5
Z 361 & Z 362	INVERTEBRATE BIOLOGY and INVERTEBRATE BIOLOGY LABORATORY
Z 371 & Z 372	VERTEBRATE BIOLOGY and VERTEBRATE BIOLOGY LABORATORY

Z 422	COMPARATIVE/FUNCTIONAL VERTEBRATE ANATOMY
Z 461	MARINE AND ESTUARINE INVERTEBRATE ZOOLOGY (Taught at Hatfield Marine Science Center)

Physiology and Behavior

Select one of the following:	3-4
ANS 441	TOPICS IN ANIMAL LEARNING
BI 358	SYMBIOSES AND THE ENVIRONMENT
BI 485	MONSTER BIOLOGY
PSY 340 or ANS 341	COGNITION ANIMAL BEHAVIOR AND COGNITION
BB 360 or PSY 432	INTRODUCTION TO NEUROSCIENCE PHYSIOLOGICAL PSYCHOLOGY
Z 423	ENVIRONMENTAL PHYSIOLOGY
Z 437	VERTEBRATE ENDOCRINOLOGY

Additional Upper-Division Science Elective

Select one of the following tracks: 3

Track I. Experiential Learning

Complete any combination of three credits of the following:

BI 401	RESEARCH AND SCHOLARSHIP (by approval)
BI 410	INTERNSHIP (by approval or international internships approved by the Integrative Biology Lead Advisor)

Track II. Upper-division Science Elective Course

Select 3 or more credits ¹

Total Hours 36-38

¹ Select an additional 3+ credit, 300–400 level course from the College of Science (BB, BHS, BI, BOT, CH, MB, MTH, PH, ST, Z) not used to complete other major requirements. Some courses are excluded (see below). Science courses outside of COS and courses and internships completed internationally may be used by Integrative Biology Lead Advisor approval. Courses from other majors, minors or Baccalaureate Core Synthesis requirements not used to meet other major requirements may also be used.

EXCLUDED COURSES: 401–410 credits, BB 350 ELEMENTARY BIOCHEMISTRY, BB 490 BIOCHEMISTRY 1: STRUCTURE AND FUNCTION–BB 492 BIOCHEMISTRY 3: GENETIC BIOCHEMISTRY, BI 331 ADVANCED HUMAN ANATOMY AND PHYSIOLOGY–BI 333 ADVANCED HUMAN ANATOMY AND PHYSIOLOGY, BI 341 ADVANCED HUMAN ANATOMY AND PHYSIOLOGY LABORATORY–BI 343 ADVANCED HUMAN ANATOMY AND PHYSIOLOGY LABORATORY, CH 334 ORGANIC CHEMISTRY, CH 335 ORGANIC CHEMISTRY, CH 336 ORGANIC CHEMISTRY, ST 314 INTRODUCTION TO STATISTICS FOR ENGINEERS, and any 399 or 499 courses not specifically approved.

* Baccalaureate Core Course (BCC)

^ Writing Intensive Course (WIC)

Option Code: 743