

Human Biology, B.S.

Understanding normal and disordered human function both require a broad integration of human physiology, behavior, and culture that is provided in this major. Students in this major will receive a unified, in-depth study of modern biology that includes ecology, evolutionary biology, genetics, biochemistry, molecular biology, cell biology, human physiology, neurobiology, and behavior. In addition, the skills and concepts needed to pursue this field are presented in upper-division laboratories. Advanced elective courses provide an opportunity to diversify exposure to the biological sciences. Additional courses in the humanities and social sciences focus on the relevance of these areas to the human condition. Given the focus on human biology, this major will serve as an ideal preparation for the health science professions.

All students must meet the University Requirements (<http://catalogue.uci.edu/informationforadmittedstudents/requirementsforabachelorsdegree/>).

All students must meet the School Requirements (<http://catalogue.uci.edu/schoolofbiologicalsciences/#schoolrequirementstext>).

Major Requirements for the B.S. in Human Biology

A. Required Major Courses:

BIO SCI D103	Cell Biology
BIO SCI E109	Human Physiology
BIO SCI N110	Neurobiology and Behavior
BIO SCI N120A- N120B- N120C	Human Biology I and Human Biology II and Human Biology III

B. Upper-Division Laboratories:

Select three of the following:

BIO SCI D111L	Developmental and Cell Biology Laboratory
BIO SCI E106L	Habitats and Organisms
BIO SCI E112L	Physiology Laboratory
BIO SCI E115L	Evolution Laboratory
BIO SCI E131L	Image Analysis in Biological Research
BIO SCI E140L	Evolution and the Environment Laboratory
BIO SCI E160L	Biology of Birds Lab
BIO SCI E166L	Field Biology
BIO SCI E179L	Field Freshwater Ecology
BIO SCI M114L	Biochemistry Laboratory
BIO SCI M116L	Molecular Biology Laboratory
BIO SCI M118L	Experimental Microbiology Laboratory
BIO SCI M121L	Advanced Immunology Laboratory
BIO SCI M130L	Advanced Molecular Lab Techniques
BIO SCI N113L	Neurobiology Laboratory

One laboratory can be satisfied with completion of Excellence in Research in the Biological Sciences.

C. Upper-Division Biology Electives:

Select two upper-division, four-unit courses from the following:

BIO SCI D103-D190, E106-E190, M114-M190, N110-N190 ²	
PHRMSCI 170A	Molecular Pharmacology I
PHRMSCI 170B	Molecular Pharmacology II
PHRMSCI 171	Physical Biochemistry
PHRMSCI 173	Pharmacotherapy
PHRMSCI 174	Biopharmaceutics and Nanomedicine
PHRMSCI 177	Medicinal Chemistry

The following course can be used to partially satisfy the Upper-Division Biology Elective Requirement:

PHYSICS 147B	Techniques in Medical Imaging I: X-ray, Nuclear, and NMR Imaging
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Additionally, Psychology/Biological Sciences double majors may also use PSYCH 112A-PSYCH 112C to partially satisfy the Upper-Division Biology Elective Requirement.

D. Behavioral Science Courses (choose 1 option):

Option 1

ANTHRO 2A	Introduction to Sociocultural Anthropology
PSYCH 7A	Introduction to Psychology
SOCIOL 1	Introduction to Sociology
Option 2	
SOC SCI H1E- H1F- H1G	Honors: Critical Issues on the Social Sciences and Honors: Critical Issues on the Social Sciences and Honors: Critical Issues on the Social Sciences
E. HUMAN 1A-HUMAN 1AS-HUMAN 1B-HUMAN 1BS-HUMAN 1C-HUMAN 1CS. or Humanities Core Alternative (including MED HUM 1 and MED HUM 3)	

- ¹ One laboratory can be satisfied with completion of Excellence in Research in the Biological Sciences.
- ² BIO SCI D103, BIO SCI D104, BIO SCI D105, BIO SCI E106, BIO SCI E109, BIO SCI N110 may not be used to satisfy more than one requirement.

Application Process to Declare the Major: The major in Human Biology is open to junior- and senior-level students only. Applications to declare the major can be made at any time, but typically in the spring of the sophomore year. Review of applications submitted at that time and selection to the major by the Human Biology Faculty Board is completed during the summer. Information can also be found at the UCI Change of Major Criteria website (<http://www.changeofmajor.uci.edu/>). Double majors within the School of Biological Sciences or with Public Health Sciences, Biomedical Engineering: Premedical, Nursing Science, or Pharmaceutical Sciences are not permitted.

Freshman		
Fall	Winter	Spring
BIO SCI 93	BIO SCI 94	MATH 5A
CHEM 1A	CHEM 1B	CHEM 1C- 1LC
HUMAN 1A	HUMAN 1B	HUMAN 1C
HUMAN 1AS	HUMAN 1BS	HUMAN 1CS
BIO SCI 2A		
Sophomore		
Fall	Winter	Spring
BIO SCI 97	BIO SCI 98	BIO SCI 99
CHEM 51A	CHEM 51B- 51LB	CHEM 51C- 51LC
CHEM 1LD	PSYCH 7A	STATS 7 or 8
MATH 5B		
BIO SCI 194S		
Junior		
Fall	Winter	Spring
BIO SCI N120A	BIO SCI 3A	BIO SCI N120C
PHYSICS 3A	BIO SCI N120B	BIO SCI N110
BIO SCI 100	BIO SCI E109	PHYSICS 3C- 3LC
SOCIOL 1	PHYSICS 3B- 3LB Research	ANTHRO 2A BIO SCI 199
Senior		
Fall	Winter	Spring
BIO SCI D103	Bio. Sci. Elective	Bio. Sci. Elective
Bio. Sci. Lab	Bio. Sci. Lab	Bio. Sci. Lab
BIO SCI 199	BIO SCI 199	BIO SCI 199