

Specialization in Behavioral Biology

Boston University College of Arts & Sciences  
Department of Biology

REQUIREMENTS

✓ 128 credits including 12 biology, anthropology, and psychology courses; 6-7 related science and math courses; second language proficiency; and 26 Hub units.

✓ C or higher is required for credit in all biology, math/computer science, and physics courses; C- or higher is necessary for credit in all required chemistry courses.

✓ Excluding Introductory Biology courses: a) at least three biology courses must have a laboratory component; b) at least three biology courses must be at the 300+ level; and c) at least five biology courses must be taken in the BU Biology Department.

✓ At least two Primary and/or Additional Electives must have an AN or PS (or cross-listed) course number.

INTRODUCTORY BIOLOGY

BI 107

BI 108 or BI 116

FOUNDATION COURSE

BI 225

BREADTH REQUIREMENTS

Choose one course from each area of biology. Courses fulfilling breadth requirements may not also fulfill elective requirements.

Cell & Molecular (CM)

Physiology & Neurobiology (PN)

BI 203 or BI 213 (or BI 218 ♦)

BI 206\* or BI 216\*

BI 310 ♦

BI 315 ♦

BI 325

Ecology, Behavior & Evolution (EBE)

BI 407 ♦

\* Recommended course  
♦ Course will count toward the three-lab requirement.

PRIMARY ELECTIVES

See **Biology Courses by Semester** and **Anthropology & Psychology Electives** on SIDE II.

1

2

ADDITIONAL ELECTIVES

See **Biology Courses by Semester**, **Anthropology & Psychology Electives**, and **Optional Programs** on SIDE II.

1

2

3

4

CHEMISTRY COURSES

See **Chemistry Requirements** on SIDE II.

1

2

3

(If on standard track)

MATH & COMPUTER SCIENCE COURSES

See **Math & Computer Science Requirements** on SIDE II.

1

2

PHYSICS COURSES

See **Physics Requirements** on SIDE II.

1

2

GENERAL EDUCATION REQUIREMENTS

For more details visit the **CAS Degree Overview** page.

CAS 2<sup>nd</sup> Language Requirement: \_\_\_\_\_

Proficiency through the fourth semester: I II III IV

BU Hub Units:

PLM

SI1

QR1

IIC

FYW

CRT

AEX

SO1

QR2

GCI

WRI

RIL

HCO

SI2/  
SO2

ETR

WIN

TWC

OSC

CRI

DME

FALL

1

2

3

4

SUM1

FIRST YEAR

SPRING

1

2

3

4

SUM2

FALL

1

2

3

4

SUM1

SOPHOMORE YEAR

SPRING

1

2

3

4

SUM2

FALL

1

2

3

4

SUM1

JUNIOR YEAR

SPRING

1

2

3

4

SUM2

FALL

1

2

3

4

SUM1

SENIOR YEAR

SPRING

1

2

3

4

SUM2

Biology courses above with a lab component (excluding BI 107/108/116):

1

2

3

Biology courses above that are 300+ level:

1

2

3

Advisor Name: \_\_\_\_\_

Advisor Signature: \_\_\_\_\_

Notes/Comments: \_\_\_\_\_

12/5/2022

SIDE I

## BIOLOGY COURSES BY SEMESTER

**Note:** Semester offerings may change. See the [Course Directory](#) and [StudentLink](#) for updated info. Courses cross-listed with those below are accepted.

### Fall Semester Courses

#### Introductory Courses

BI 107 Biology 1

#### Foundation Courses

BI 225 Behavioral Biology

#### Breadth Courses

BI 203 Cell Biology

BI 213 Intensive Cell Biology

BI 218 Cell Biology with ISE Lab ♦

BI 310 Human Structure & Function ♦

BI 315 Systems Physiology ♦

BI 325 Princ. of Neurosci.

BI 407 Animal Behavior ♦

#### BI Primary Electives

BI 520 Sensory Neurobiology (IRR)

#### BI Additional Electives

BI 203 Cell Biology

BI 213 Intensive Cell Biology

BI 218 Cell Biology with ISE Lab ♦

BI 306 Bio. of Global Change ♦

BI 309 Evolution

BI 325/(NE 203 ♦) Princ. of Neurosci.

BI 333 Human Population Genetics ❖

BI 510 Inst. Racism in Health&Science

BI 520 Sensory Neurobiology (IRR)

BI 535 Trans. Research in Alzheimer's

BI 588 Proj. Design&Stat. in Bio. Anthro. ❖

♦ Course counts toward the three-lab requirement

❖ Course typically offered every other year

(IRR) Course offered irregularly

### Spring Semester Courses

#### Introductory Courses

BI 108 Biology 2

BI 116 Biology 2 with ISE Lab

#### Foundation Courses

BI 225 Behavioral Biology

#### Breadth Courses

BI 203 Cell Biology

BI 206 Genetics

BI 216 Intensive Genetics

BI 315 Systems Physiology ♦

BI 325 Principles of Neuroscience

#### BI Primary Electives

BI/NE 230 Behavioral Endocrinology

BI 449 Neuroscience Design Lab ♦

BI 508 Behavioral Ecology (IRR)

BI 520 Sensory Neurobiology (IRR)

BI 542 Neuroethology

#### BI Additional Electives

BI 203 Cell Biology

BI 206 Genetics

BI 216 Intensive Genetics

BI/NE 230 Behavioral Endocrinology

BI 260 Marine Biology

BI 302 Vertebrate Zoology ♦

BI 303 Ecology ♦

BI 306 Bio. of Global Change ♦

BI 325 Principles of Neuroscience

BI 414 Ornithology ❖

BI 448 Biodiversity and Conservation

BI 449 Neuroscience Design Lab ♦

BI 500 Shark Biology & Conservation

BI 504 Advanced Evol. Analysis

BI 506 Phenotypic Plasticity ❖

BI 510 Inst. Racism in Health&Science

BI 515 Population Genetics ❖

BI 519 Theor. Evol. Ecology ♦❖

BI 520 Sensory Neurobiology (IRR)

BI 542 Neuroethology

## ANTHROPOLOGY & PSYCHOLOGY ELECTIVES

AN 233 Evolutionary Bio of Human Variation (AE)

AN 234 Evolutionary Psychology (AE, PE)

AN 263 Behavioral Biology of Women (AE)

AN 330 Evolution of Human Life History (AE)

AN 331 Human Origins (AE)

AN 335 The Ape Within (AE, PE)

AN 336 Primate Evolutionary Ecology (AE)

AN 338 Lucy: The Oldest Woman (AE)

AN 339 Primate Biomechanics (AE)

AN 534 Adv. Topics in Human Behav. Evolution (AE)

AN 551 Anthropology and Human Heredity (AE)

AN 552 Primate Evolution and Anatomy (AE)

AN 553 Human Uniqueness (AE)

AN 555 Evolutionary Medicine (AE)

AN 556 Evolution of the Human Diet (AE)

AN 558 Human Sex Difference (AE)

AN 559 Evolutionary Endocrinology (AE, PE)

AN 597 Issues in Biological Anthro. (AE)

AN 598 Issues in Biological Anthro. (AE)

PS 231 Physiological Psychology (AE, PE)

PS 234 Psychology of Learning (AE)

PS 241 Developmental Psychology (AE)

PS/NE 333 Drugs and Behavior (AE)

PS 336 Intro. to Cognitive Psych. (AE)

PS/NE 337 Memory Systems of the Brain (AE, PE)

PS/NE 338 Neuropsychology (AE, PE)

PS/NE 521 Animal Models in Behav. Neur. (AE, PE)

PS/NE 528 Human Brain Mapping (AE)

PS/NE 544 Dev. Neuropsychology (AE, PE)

(AE) Additional Elective (PE) Primary Elective

## CHEMISTRY REQUIREMENTS

Choose a track.

### Standard (Pre-Medical) Track

General Chemistry: Choose one sequence.

Sequence I Sequence II Sequence III

CH 101

CH 109

CH 111

CH 102/

CH 110

CH 112

CH 116

Organic Chemistry:

Choose one course.

CH 203/CH 218

CH 211

Note: Pre-health students may need additional courses including CH 204 (or 212 or 214) and biochemistry BI/CH 421 or CH 373.

### Additional Sequences to Satisfy the Chemistry Requirement

General Chemistry: Choose one sequence.

Sequence I Sequence II

CH 171

General Chemistry

Sequence from Standard

Track (2 courses)

Organic Chemistry:

Choose one course.

CH 172\*

CH 174

\*Includes biochemistry content.

## MATH & COMPUTER SCIENCE REQUIREMENTS

Choose two courses from the lists below. At least one course must be calculus or statistics.

Calculus

Statistics

Computer Science

MA 121 or 123

MA 115 or 213

CS 105

MA 122 or 124

MA 116 or 214

CS 108

MA 127 or 129

CDS DS 100

CS 111

MA 196

CDS DS 110

## PHYSICS REQUIREMENTS

Choose one sequence.

PY 105 and PY 106

PY 211 and PY 212

PY 211 and PY 106

PY 241 and PY 242

## RESEARCH COURSES (Application Required)

### Undergraduate Research

BI 140/141 Undergraduate Research in Biology 1 (2 cr)

BI 240/241 Undergraduate Research in Biology 2 (2 cr)

BI 340/341 Undergraduate Research in Biology 3 (2 cr)

BI 350-352 Undergraduate Research in Biology 3 (4 cr ♦)

BI 450-453 Undergraduate Research in Biology 4 (4 cr ♦)

BI 401/402 Honors Research in Biology (4 cr ♦)

BI 497/498 Honors Research in Biology Seminar (2 cr)

- Up to two of the above 4-credit research courses can count as electives; one of those can apply towards the three-lab requirement.
- For more info. visit [www.bu.edu/biology/undergrad/research](http://www.bu.edu/biology/undergrad/research)

## STUDY ABROAD PROGRAMS

### Madrid, Spain

- Offered in the fall semester; courses taught in English.
- Targeted to sophomores in science majors/pre-med students.
- For more information, visit: [www.bu.edu/abroad](http://www.bu.edu/abroad)

### Marine Semester (MS) BI Courses ♦

- For more information, visit: [www.bu.edu/bump/marine-semester/](http://www.bu.edu/bump/marine-semester/)

Other possible study abroad locations include Sydney and London. Visit [www.bu.edu/abroad](http://www.bu.edu/abroad) for more information.

## ADDITIONAL RESOURCES

[www.bu.edu/biology](http://www.bu.edu/biology)

617.353.2432

Contact your assigned advisor for more information.

Please note: The **Bulletin** is the authority on all requirements and policies. For official tracking of your academic progress, visit <https://degree-advice.bu.edu>