Name: _____ **BU ID:** _____

Specialization in Biodiversity, Conservation & Global Change Biology

Boston University College of Arts & Sciences
Department of Biology

REQUIREMENTS

- ✓ 128 credits including 12 biology courses; 6-7 related chemistry, math/computer science, and physics 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.

INTRODUCTORY BIOLOGY

Both courses are required.

☐ BI 107 ☐ BI 108 **or** BI 116

FOUNDATION COURSES

All three courses are required.

☐ BI 303 ◆ or 306 ◆
☐ BI 309
☐ BI 448

◆ Course will count toward the requirement for 3 lab courses.

BREADTH REQUIREMENTS

Choose one course from each area of biology.

Physiology & Neurobiology (PN)
☐ BI 310 ◆
☐ BI 315 ◆
☐ BI 325

Cell & Molecular (CM)
☐ BI 203 or BI 213
☐ BI 206 (recommended) or BI 216

BCG ELECTIVES

All five courses are required. See **Courses by Semester** and **Optional Programs** on SIDE II.

1 _____ 4 _____
2 _____ 5 _____
3 _____

CHEMISTRY COURSES

See **Chemistry Requirements** on SIDE II.

1 _____ 2 _____ 3 _____ *(If on intensive 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 2nd 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	SPRING
FIRST YEAR	1	1
	2	2
	3	3
	4	4
	SUM1	SUM2
SOPHOMORE YEAR	FALL	SPRING
	1	1
	2	2
	3	3
	4	4
	SUM1	SUM2
JUNIOR YEAR	FALL	SPRING
	1	1
	2	2
	3	3
	4	4
	SUM1	SUM2
SENIOR YEAR	FALL	SPRING
	1	1
	2	2
	3	3
	4	4
	SUM1	SUM2

Biology courses above with a lab component (excluding BI 107/108/116):
1 _____ 2 _____ 3 _____

Biology courses above that are 300+:
1 _____ 2 _____ 3 _____

Advisor Name: _____

Advisor Signature: _____

Notes/Comments:

BIOLOGY COURSES BY SEMESTER

Note: Semester offerings may change. See MyBU for updated info. Courses cross-listed with those below are accepted. It is recommended that the electives taken include 1 taxonomically focused course, 1 quantitative or computationally intensive course, 1 experiential research-based course.

Fall Semester Courses

Introductory Courses
BI 107 Biology 1

Foundation Courses
BI 306 Bio. of Global Change ◆
BI 448 Biodiv. and Conservation

Breadth Courses
BI 203 Cell Biology
BI 206 Genetics
BI 213 Intensive Cell Biology
BI 310 Human Structure & Function ◆
BI 315 Systems Physiology ◆
BI 325 Princ. of Neurosci.

BCG Electives
BI 225 Behavioral Biology
BI 305 Plant Biology ◆ (T)
BI/EE 307 Biogeography
BI 310 Human Structure ◆ (T)
BI 311 Microbiology ◆ (T)
BI 333 Human Population Genetics ❖ (T)
BI 407 Animal Behavior ◆
BI 408 Insect Biology ◆ (T)
BI 411 Microbiome
BI 443 Terrestrial Biogeochemistry
BI 503 Neuroimmunology
BI 510 Inst. Racism in Health&Science
BI 513 Genetics Lab ◆
BI 515 Population Genetics ❖
BI 588 Proj. Des.&Stats. in Bio. ❖ (Q)
Marine Semester BI Courses

Spring Semester Courses

Introductory Courses
BI 108 Biology 2
BI 116 Biology 2 with ISE Lab

Foundation Courses
BI 309 Evolution
BI 306 Bio. of Global Change ◆
BI 303 Ecology ◆

Breadth Courses
BI 203 Cell Biology
BI 206 Genetics
BI 216 Intensive Genetics
BI 315 Systems Physiology ◆
BI 325 Principles of Neuroscience

BCG Electives
BI 225 Behavioral Biology
BI 260 Marine Biology
BI 302 Vertebrate Zoology (T)
BI 413 Microbial Ecology (T)
BI 414 Ornithology ❖ (T)
BI 423 Marine Biogeochemistry
BI 500 Shark Biology & Conservation (T)
BI 505 Evolution and Development
BI 506 Phenotypic Plasticity ❖
BI 508 Behavioral Ecology
BI 509 Metapopulation Ecology
BI 530 Forest Ecology ❖
BI 550 Marine Genomics ◆(E,Q)

CHEMISTRY REQUIREMENTS

Choose a track.

☐ **Standard Track** **(Not acceptable for most pre-health careers)**

General Chemistry: Choose one sequence.

General Chemistry
☐ CH 171

Organic Chemistry:
Choose one course.
☐ CH 172*
☐ CH 174

**Includes biochemistry content.*

☐ **Intensive Track**

General Chemistry: Choose one sequence.

Sequence I	Sequence II	Sequence III
☐ CH 101	☐ CH 109	☐ CH 111
☐ CH 102	☐ CH 110	☐ CH 112

Organic Chemistry:
Choose one course.
☐ CH 203
☐ CH 211

Note: Pre-health students may need additional courses including organic chemistry II CH 204/214 and biochemistry BB 421 or CH 373.

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 106
☐ PY 104*
☐ PY 211 **and** PY 212
☐ PY 241 **and** PY 242

*Note: CAS PY 104 may be used to satisfy the physics requirement for this major only by permission of the Biology department.

◆ Course will count toward the requirement for 3 lab courses.
❖ Course typically offered every other year.
^ EE 101 is a prerequisite for BI 307
T Taxonomically focused course
Q Quantitative or computationally intensive course
E Experiential research-based course

NON-DEPARTMENTAL COURSES

A maximum of two of the following courses can be used as BCG electives:

AN 331 Human Origins (T)
AN 335 The Ape Within (T)
AN 336 Primate Evol. Ecology (T)
AN 339 Primate Biomechanics (T)
AN 552 Primate Evolution & Anat. (T)
AN 598 Spec. Is. in Bio. Anthro. (T)
EE 302 Remote Sensing of Environ. (Q)
EE 310 Climate and the Environment
EE 365 Intro. to Geo. Info. Systems
EE 375 Intro. to Quant. Env. Model. (Q)
EE 504 Physical Climatology
EE 525 Plant Physiological Ecology (T)

OPTIONAL PROGRAMS (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/

Global Programs

- Universidad San Francisco de Quito (USFQ)
- Sydney STEM
- For more information, visit: www.bu.edu/abroad

Marine Semester (MS) BI Courses ◆

- For more information, visit: www.bu.edu/bump/marine-semester/

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