

Biology and English, BS (Boston)

In the combined biology and English degree, science courses lay the groundwork for strong basic training in mathematics, chemistry, and physics that are relevant to biology. In biology courses, students broadly explore the organization and processes of life—from molecules and cells through organs and organ systems to populations, ecosystems, and evolution. In English courses, students have an opportunity to develop critical thinking skills, analyze complex texts, and communicate effectively by examining literature, media, rhetoric, and writing practices across historical, cultural, and aesthetic contexts. The fields of biology and English are bridged with coursework in science writing, the study of how the life sciences are communicated through the literature, and through exploration of how emerging communication technologies shape the healthcare system.

Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

Universitywide Requirements

All undergraduate students are required to complete the Universitywide Requirements (<https://catalog.northeastern.edu/undergraduate/university-academics/university-wide-requirements/>).

NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (<https://catalog.northeastern.edu/undergraduate/university-academics/nupath/>).

Biology Requirements

Code	Title	Hours
Introduction to College		
BIOL 1000 or ENGL 1000 or INSC 1000	Biology at Northeastern English at Northeastern Science at Northeastern	1
Experiential Learning Introduction		
EESC 2000	Professional Development for Co-op	1
Biology Core Courses		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 2309	Biology Project Lab	4
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
Organismal and Evolutionary Biology Elective		
Complete one of the following:		4-5
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3413	Current Topics in Organismal and Population Biology	
BIOL 5585	Evolution	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 2400	Introduction to Evolution	
EEMB 2610	Plant Biology	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3460	Conservation Biology	
EEMB 3466	Disease Ecology	
EEMB 3600	Animal Behavior	
Intermediate/Advanced Biology Elective		
Complete one course from the following:		4-5
BIOL 2327 to BIOL 3999		

BIOL 4705 to BIOL 5999

Supporting Courses for Biology*Chemistry*

CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
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CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
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CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
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Math

MATH 1341	Calculus 1 for Science and Engineering	4
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Biostatistics

ENVR 2500 and ENVR 2501 and ENVR 2502	Biostatistics and Lab for ENVR 2500 and Recitation for ENVR 2500	5
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Physics

PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5
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Intermediate/Advanced Science Elective

Complete one course from the following:		4-5
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BIOL 2301 to BIOL 5999

CHEM 2311 to CHEM 5999

EEMB 2290 to EEMB 5999

ENVR 2310 to ENVR 5999

MATH 2280 to MATH 5999

PHYS 2303 to PHYS 5999

PSYC 2290 to PSYC 5999

Writing Requirements for the College

ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
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ENGW 3307 or ENGW 3315	Advanced Writing in the Sciences (Preferred) Interdisciplinary Advanced Writing in the Disciplines	4
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English Requirements

Code	Title	Hours
Foundational Courses		
ENGL 1160 or ENGL 1410	Introduction to Rhetoric Introduction to Research on Writing	4
ENGL 1300	Introduction to Health and Humanities	4
ENGL 1400	Introduction to Literary Studies	4

English Electives

Two of the courses chosen from the list below must be at the 3000 or 4000 level.

Diversity

Complete one of the following (you may reuse this course to fulfill an additional English requirement below):		4
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ENGL 2296 Early African-American Literature

ENGL 2450 Postcolonial Literature

ENGL 2455 American Women Writers

ENGL 2470 Asian-American Literature

ENGL 2760 Writing in Global Contexts

ENGL 3678 Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity

Literary Periods*Pre-1850*

Complete one of the following:		4
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ENGL 1502	American Literature to 1865
ENGL 1600	Introduction to Shakespeare
ENGL 2296	Early African-American Literature
ENGL 2330	The American Renaissance
ENGL 3101	Early Literatures
ENGL 3120	17th- and 18th-Century Literatures
ENGL 3160	Topics in 17th- and 18th-Century British Literatures
ENGL 3619	Emerson and Thoreau
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
ENGL 4010	Topics in Shakespeare

Post-1850

Complete one of the following:

4

ENGL 2301	The Graphic Novel
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2440	The Modern Bestseller
ENGL 2450	Postcolonial Literature
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2470	Asian-American Literature
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 3161	20th- and 21st-Century Literatures

Theories and Methods

Complete one of the following:

4

ENGL 1140	Grammar: The Architecture of English
ENGL 1160	Introduction to Rhetoric
ENGL 1410	Introduction to Research on Writing
ENGL 1450	Reading and Writing in the Digital Age
ENGL 2520	Science Fiction
ENGL 2620	What Is Nature?
ENGL 3070	Literary Genres
ENGL 3325	Rhetoric of Law
ENGL 3381	The Practice and Theory of Teaching Writing
ENGL 3400	Opening the Archive
ENGL 3487	Film and Text (Abroad)
ENGL 3700	Narrative Medicine
LING 1150	Introduction to Linguistics
LING 2350	Linguistic Analysis
LING 3450	Syntax
LING 3452	Semantics
LING 3454	History of English
LING 3456	Language and Gender

Major Seminar

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ENGL 3710	Major Seminar
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Writing

Complete one of the following:

4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2730	Digital Writing
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2850	Writing for Social Media: Theory and Practice

ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Writing Seminar

English Elective

Complete any one ENGL course that has not already been used to fulfill another requirement. 4

Integrative Courses

Code	Title	Hours
Integrative Courses		
Complete three of the following:		12
ENGL 2620	What Is Nature?	
ENGL 2650	Science Writing: Origins, Ethics, and Emerging Genres	
ENGL 2770	Writing to Heal	
ENGL 3340	Technologies of Text	
ENGL 3460	The Archives of Public Health	
ENGL 3700	Narrative Medicine	
INSH 2300	Culture, Technology, and the Future of Health	
ENVR 2118	Ocean Literacies	

Capstone Requirement

Code	Title	Hours
Capstone		
Complete one of the following:		1-4
BIOL 4701	Biology Capstone	
BIOL 4900	Biology Research Capstone (concurrent with BIOL 4991 or BIOL 4994, which may be used toward Intermediate/Advanced Biology)	
BIOL 4971	Junior/Senior Honors Project 2	
ENGL 4710	Capstone Seminar	

General Electives

Complete any remaining semester hours after major and NUpath courses to reach the minimum semester-hour program requirement.

Biology and English Combined Major GPA Requirement

Minimum 2.000 GPA required in all BIOC, BIOL, CHEM, PHYS, MATH, EEMB, ENVR, and PSYC courses

Minimum 2.000 GPA required in all ENGL courses

NUpath Requirements Satisfied

- Advanced Writing in the Discipline
- Analyzing and Using Data
- Conducting Formal and Quantitative Reasoning
- Demonstrating Thought and Action in a Capstone
- Engaging with the Natural and Designed World
- Interpreting Culture
- Writing in the First Year
- Writing-Intensive in the Major

Program Requirement

128 total semester hours required

Plan of Study**Sample Plan of Study****FOUR YEARS, TWO CO-OPS IN SUMMER SECOND HALF/FALL****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 1000 or ENGL 1000		1 BIOL 2299		4 BIOL 2301		4 Vacation	
BIOL 1107	4	CHEM 2311	4	BIOL 2302		1	
BIOL 1108	1	CHEM 2312	1	English writing elective		4	
CHEM 1161	4	ENGL 1160 or 1410		4			
CHEM 1162	1	ENGL 1400		4			
CHEM 1163	0						
ENGW 1111	4						
MATH 1341	4						
	19		17		9		0

Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 2309		4 BIOL 3611		4 Intermediate/advanced BIOL elective		4 Co-op	0
CHEM 2313	4	BIOL 3612	1	NUpath elective		4	
CHEM 2314	1	PHYS 1145		4			
EESC 2000	1	PHYS 1146		1			
ENGL 1300	4	Literary period 1		4			
English diversity elective	4	Organismal and evolutionary biology elective		4			
	18		18		8		0

Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		0 Integrative course		4 ENGW 3307		4 Co-op	0
ENGL 3710	4	Intermediate/advanced science elective		4 English theories and methods elective		4	
		Literary period 2		4			
		English elective		4			
	4		16		8		0

Year 4

Fall	Hours	Spring	Hours
Co-op	0	ENVR 2500	4
		ENVR 2501	1
		ENVR 2502	0
		BIOL or ENGL capstone	4
		Integrative course	4
		Integrative course	4
	0		17

Total Hours: 134