

Biology and English, BS

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 study the diverse historical, cultural, and aesthetic contexts of English, American, and other Anglophone literatures; analyze writing practices and related media; and practice a variety of approaches to the study of language, rhetoric, writing, and literature. The fields of biology and English are bridged with course work in different forms of science writing, as well as psychology and sociology courses exploring the acquisition of language and reading; the sociology of health and illness; and the environment, technology, and society.

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 (<http://catalog.northeastern.edu/undergraduate/university-academics/university-wide-requirements/>).

NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (<http://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
Required Biology		
<i>Foundations</i>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<i>Inquiries</i>		
BIOL 2299	Inquiries in Biological Sciences	4
<i>Genetics</i>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<i>Project Lab</i>		
BIOL 2309	Biology Project Lab	4
<i>Biochemistry</i>		
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
Biology Elective		
Code	Title	Hours
Intermediate/Advanced Biology		
Complete one of the following:		4-5
BIOL 2327 to BIOL 3999		
BIOL 4705 to BIOL 5999		
Organismal and Evolutionary Biology		
Complete one of the following:		4-5
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3403	Animal Behavior	

BIOL 3413	Current Topics in Organismal and Population Biology
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302
EEMB 2400	Introduction to Evolution
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700
EEMB 3460	Conservation Biology
EEMB 3466	Disease Ecology

Supporting Courses for Biology

Code	Title	Hours
Mathematics		
MATH 1251	Calculus and Differential Equations for Biology 1	4
Statistics		
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
Chemistry		
<i>General Chemistry</i>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
<i>Organic Chemistry</i>		
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
Physics		
<i>Physics 1</i>		
Complete one of the following lecture/lab pairs. PHYS 1145/PHYS 1146 is recommended:		5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
<i>Physics 2</i>		
Complete one of the following lecture/lab pairs. PHYS 1147/PHYS 1148 is recommended:		5
PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	

English Requirements

Code	Title	Hours
Foundational Courses		
ENGL 1000	English at Northeastern	1
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160 or ENGL 1410	Introduction to Rhetoric Introduction to Research on Writing	4
ENGL 1700 or ENGL 1701	Global Literatures 1 Global Literatures 2	4

English Electives

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

Code	Title	Hours
Diversity		
Complete one course from the following. You may reuse this course to fulfill an additional English requirement below.		4
ENGL 2150	Literature and Digital Diversity	
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 3663	The African American Novel	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3685	Modern and Contemporary Jewish Literature	
Literary Periods		
<i>Pre-19th Century Literature</i>		
Complete one course from the following:		4
ENGL 1600	Introduction to Shakespeare	
ENGL 2296	Early African-American Literature	
ENGL 3101	Early Literatures	
ENGL 3120	17th- and 18th-Century Literatures	
ENGL 3618	Milton	
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	
<i>19th/20th/21st Century Literature</i>		
Complete one of the following courses:		4
<i>19th Century</i>		
ENGL 2330	The American Renaissance	
ENGL 3140	19th-Century Literatures	
ENGL 3619	Emerson and Thoreau	
ENGL 3720	19th-Century Major Figure	
<i>20th/21st Century</i>		
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 3161	20th- and 21st-Century Literatures	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3730	20th- and 21st-Century Major Figure	
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 2150	Literature and Digital Diversity	
ENGL 3325	Rhetoric of Law	
ENGL 3381	The Practice and Theory of Teaching Writing	
ENGL 3400	Opening the Archive	
ENGL 3700	Narrative Medicine	
LING 1150	Introduction to Language and Linguistics	
LING 2350	Linguistic Analysis	

LING 3450	Syntax
LING 3452	Semantics
LING 3454	History of English
LING 3456	Language and Gender
LING 3458	Topics in Linguistics

Comparative Course

Complete one of the following courses: 4

ENGL 1450	Reading and Writing in the Digital Age
ENGL 1500	British Literature to 1800
ENGL 1502	American Literature to 1865
ENGL 2150	Literature and Digital Diversity
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2455	American Women Writers
ENGL 2470	Asian-American Literature
ENGL 2510	Horror Fiction
ENGL 2520	Science Fiction
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2620	What Is Nature?
ENGL 2690	Boston in Literature
ENGL 3487	Film and Text (Abroad)
ENGL 3663	The African American Novel

Writing

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2730	Digital Writing
ENGL 2740	Writing and Community Engagement
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
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

English Electives

Complete any two ENGL courses that have not already been used to fulfill another requirement. 8

Integrative Courses

Code	Title	Hours
Integrative English Course		
Complete one of the following: 4		
ENGL 2620	What Is Nature?	
ENGL 2650	Science Writing: Origins, Ethics, and Emerging Genres	
ENGL 2770	Writing to Heal	
ENGL 3340	Technologies of Text	
Integrative General Biological Sciences Course		
Complete one of the following: 4		
PSYC 3464	Psychology of Language	
PSYC 4522	Psychology of Reading	

Capstone Requirement

Complete one of the following capstone options:

Code	Title	Hours
Biology Capstone: complete one of the options to fulfill the capstone requirement in biology.		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	
English Capstone		
ENGL 4710 or ENGL 4720	Capstone Seminar Capstone Project	4

Biology and English Combined Major GPA Requirement

Minimum 2.000 GPA required in all BIOL courses

Minimum 2.000 GPA required in all ENGL courses

Program Requirement

128 total semester hours required