

Biology and Political Science, BS (Boston)

In the biology and political science BS program, 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 political science courses, students pursue core concepts of American government, comparative politics, international relations, and political thought. Coursework in quantitative techniques is also required. Students choose from a range of advanced subject electives and optional concentrations in political science. An appreciation of the intersection of biology, ethical political policy, and political science is provided through integrative coursework.

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 POLS 1000 or INSC 1000	Biology at Northeastern Political Science 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		
Complete one course from the following:		4-5
BIOL 2327 to BIOL 3999		

BIOL 4705 to BIOL 5999

Supporting Courses for Biology*Mathematics*

MATH 1341	Calculus 1 for Science and Engineering	4
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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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Physics

PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5
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Writing

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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Political Science Requirements

Code	Title	Hours
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Core Courses in Political Science

POLS 1150	American Government	4
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POLS 1155	Comparative Politics	4
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POLS 1160	International Relations	4
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Statistics

Complete one of the following:		4-5
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ENVR 2500 and ENVR 2501 and ENVR 2502	Biostatistics and Lab for ENVR 2500 and Recitation for ENVR 2500	
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POLS 2400	Quantitative Techniques	
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Political Thought

Complete one of the following:		4
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POLS 2325	Ancient Philosophy and Political Thought	
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POLS 2328	Modern Political Thought	
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POLS 2330	American Political Thought	
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POLS 2332	Contemporary Political Thought	
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Political Science Electives

Note: You may use four courses from the elective areas to fulfill a concentration.

Complete five POLS courses at the 2000 level and above. 20

Political Science Concentration (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record.

- American Political Institutions (p. 3)
- Campaigns and Elections (p. 3)
- Comparative Politics (p. 4)
- Identity, Culture, and Politics (p. 4)
- International Relations and Diplomacy (p. 4)
- Law and Legal Studies (p. 4)
- Public Policy (p. 5)
- Security Studies (p. 5)

Integrative Requirements and Capstone

Note: Political science courses listed below (POLS) cannot be used both as an integrative course and as an elective above.

Code	Title	Hours
Integrative Requirements		
Complete two of the following:		8
BIOL 2329	Bioethics	
BIOL 3419	Engaging with Genomics: Ethics Law and Policy	
BIOL 3423	Animal Models in Biomedical Research	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 2396	The Psychology of Misinformation	
Capstone Requirement		
Complete one of the following:		1-4
BIOL 4701	Biology Capstone	
BIOL 4900	Biology Research Capstone (concurrent with BIOL 4991 or 4994, which may be used toward Intermediate/Advanced Biology)	
BIOL 4971	Junior/Senior Honors Project 2	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

GPA Requirements

Minimum 2.000 GPA in the following course codes is required: BIOC, BIOL, BNSC, CHEM, EEMB, ENVR, MATH, PHYS, PSYC

Minimum 2.000 GPA required in all POLS 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
- Exploring Creative Expression and Innovation
- Engaging with the Natural and Designed World
- Understanding Societies and Institutions
- Writing in the First Year
- Writing-Intensive in the Major

Program Requirement

136 total semester hours required

CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 3160	Campaign Strategy	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	

CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
Required Courses		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
Campaigns and Elections Electives		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	

POLS 3310	Public Opinion, Voting, and Elections
POLS 3320	Politics and Mass Media

CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
Theoretical Requirement		
Complete two of the following:		8
POLS 2282	The Holocaust and Comparative Genocide	
POLS 2356	Democratic Erosion	
POLS 2359	Immigration Politics	
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
Regional Requirements		
Complete one of the following:		4
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
Experiential/Practicum Requirement		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
Core Course		
POLS 3418	Nationalism	4
Electives		
Complete three of the following:		12
POLS 2359	Immigration Politics	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

Code	Title	Hours
Experiential/Practicum Requirement		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
Core Courses		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 5408	International Security	

CONCENTRATION IN LAW AND LEGAL STUDIES

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	

POLS 3302	Judicial Process and Behavior
POLS 3324	Law and Society
POLS 3406	International Law
POLS 4500	U.S. Constitutional Law
POLS 4505	U.S. Civil Liberties

CONCENTRATION IN PUBLIC POLICY

Code	Title	Hours
Core Requirement		
POLS 3307	Public Policy and Administration	4
Electives		
Complete three of the following:		12
POLS 2345	Urban Policies and Politics	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

CONCENTRATION IN SECURITY STUDIES

Code	Title	Hours
Complete four of the following:		16
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
POLS 5408	International Security	

Plan of Study

Please note that these are sample plans of study. While the requirements are the same for all students, individual schedules may vary.

Sample Plans of Study**FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER FIRST HALF**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 1000 or POLS 1000		1 BIOL 2299		4 BIOL 2301		4 Vacation	
BIOL 1107		4 CHEM 2311		4 BIOL 2302		1	
BIOL 1108		1 CHEM 2312		1 POLS upper-division elective		4	
CHEM 1161		4 ENGW 1111		4			
CHEM 1162		1 POLS 1155		4			
MATH 1341		4					
POLS 1150		4					
	19		17		9		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 2309		4 Co-op		0 Co-op		0 Intermediate/advanced BIOL elective with lab	5
CHEM 2313		4 Elective (can be taken online)		4		POLS elective	4
CHEM 2314		1					
EESC 2000		1					
POLS 1160		4					
IC NUpath elective		4					
	18		4		0		9

Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 3611		4 Co-op		0 Co-op		0 Advanced writing	4
BIOL 3612		1				ER NUpath elective	4
PHYS 1145		4					
PHYS 1146		1					
Organismal and evolutionary biology elective with lab		5					
Political thought course		4					
		19		0		0	8

Year 4

Fall	Hours	Spring	Hours				
BIOL/POLS integrative course		4 ENVR 2500		4			
BIOL/POLS integrative course		4 ENVR 2501		1			
DD NUpath elective		4 Capstone		4			
POLS elective		4 POLS elective		4			
		POLS elective		4			
		16		17			

Total Hours: 136**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 POLS 1000		1 BIOL 2299		4 BIOL 2301		4 Vacation	
BIOL 1107		4 CHEM 2311		4 BIOL 2302		1	
BIOL 1108		1 CHEM 2312		1 POLS elective		4	
CHEM 1161		4 ENGW 1111		4			
CHEM 1162		1 POLS 1155		4			
CHEM 1163		0					
MATH 1341		4					
POLS 1150		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 with lab		5 Co-op	0
CHEM 2313		4 BIOL 3612		1 POLS elective		4	
CHEM 2314		1 PHYS 1145		4			
EESC 2000		1 PHYS 1146		1			
POLS 1160		4 Organismal and evolutionary biology elective with lab		5			
IC NUpath elective		4 Political thought course		4			
		18		19		9	0

Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		0 BIOL/POLS integrative course		4 Advanced writing		4 Co-op	0
General elective (can be taken online)		4 BIOL/POLS integrative course		4 ER NUpath elective		4	
		DD NUpath elective		4			

		POLS elective	4		
		4	16	8	0
Year 4					
Fall	Hours	Spring	Hours		
Co-op		0 ENVR 2500	4		
		ENVR 2501	1		
		Capstone	4		
		POLS elective	4		
		POLS elective	4		
		0	17		

Total Hours: 136