Health Science, BS

The health science major offers students a solid academic and experiential foundation that positions them well to pursue graduate and professional school training in the following programs:

- Medicine
- Dentistry
- Veterinary medicine
- Public health
- Physician assistant studies
- Nurse practitioner
- Pharmacy
- Physical therapy
- Social work
- Speech-language pathology

In addition to the required courses for the Bachelor of Science in Health Science, students who are interested in clinical graduate school programs can utilize available elective slots to complete prerequisite courses. The Northeastern PreMed and PreHealth Advising Program (https://undergraduate.northeastern.edu/prehealth/academics-2/coursework/) provides individualized advising resources to Northeastern undergraduate students and alumni considering careers in the areas of allopathic medicine (MD), osteopathic medicine (DO), dentistry, optometry, physician assistant, podiatric medicine, or veterinary medicine. Please visit the BS Health Science webpage (https://bouve.northeastern.edu/health-sciences/programs/bs/) to learn more about premed and prehealth pathways.

The health science major is also designed for students who are seeking a strong foundation for a career in health administration and in community-based health promotion and public health.

Please visit Bouvé College Learning Outcomes (https://bouve.northeastern.edu/learning-outcomes/) for the specific student learning outcomes for this program.

Program Requirements

- Concentrations and course offerings may vary by campus and/or by program modality. Please consult with your advisor or admissions coach for the course availability each term at your campus or within your program modality.
- Certain options within the program may be *required* at certain campuses or for certain program modalities. Please consult with your advisor or admissions coach for requirements at your campus or for your program modality.

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/).

Public Health Core

Code	Title	Hours
PHTH 1260	The American Healthcare System	4
or PHTH 1261	Comparative Healthcare Systems	
PHTH 2210	Foundations of Biostatistics	4
PHTH 2300	Communication Skills for the Health Professions	4
or PHTH 2301	Communication Skills for the Health Professions—Global	
PHTH 2350	Community and Public Health	4
or PHTH 2351	Community and Public Health - Global	

PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	4
PHTH 4540	Health Education and Program Planning	4

Science Requirement

Code	Title	Hours
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
MATH 1241	Calculus 1	4
PSYC 1101	Foundations of Psychology	4

Selectives

Code	Title	Hours
Complete at least three courses from the groups listed below with at least two in one category. At least one of the courses must be at the 2000 level or higher. Students may complete additional courses to fulfill a minor, such as global health, nutrition, and exercise science.		9-13

Society and Health	
ANTH 3441	Medical Anthropology
CRIM 3040	Psychology of Crime
HLTH 5280	The (in)Visibility of (dis)Ability in Society
INSH 1300	Introduction to Health and Humanities
PHTH 1270	Introduction to Global Health
or AFCS 1270	Introduction to Global Health
PHTH 2414	Environmental Health
PHTH 2616	Rural Health: An Interdisciplinary Seminar
PHTH 5222	Health Advocacy
PHTH 5234	Economic Perspectives on Health Policy
SOCL 1245	Sociology of Poverty
SOCL 1246	Environment and Society
SOCL 1260	Sociology of Gender
SOCL 1295	Drugs and Society
SOCL 2225	Sociology of Disability
SOCL 2303	Gender and Reproductive Justice
SOCL 2485	Environment, Technology, and Society
SOCL 3441	Sociology of Health and Illness
SOCL 4522	Environmental Justice
WMNS 1225	Gender, Race, and Medicine
Policy and Administration	
ECON 1230	Healthcare and Medical Economics
ECON 3404	International Food Policy
HUSV 2800	Sexual Orientation and Gender Expression
HUSV 3900	Social Policy
INNO 2206	Global Social Enterprise
LPSC 2301	Introduction to Law, Policy, and Society
MGMT 3340	Healthcare Management, Innovation, and Design
ORGB 3201	Organizational Behavior
PHTH 4511	Healthcare Management
PHTH 5232	Evaluating Healthcare Quality
PHTH 5234	Economic Perspectives on Health Policy

POLS 2395	Environmental Politics and Policy
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy
SOCL 2205	Law and Social Justice
SOCL 3241	Violence and Society
Nutrition and Wellness	
CAEP 1280	Introduction to Mindfulness
CAEP 1290	Personal Behavior Change
CAEP 2012	Health Psychology: An Introduction
CAEP 2101	Behavioral Assessment and Treatment of Health Problems in the 21st Century
COMM 2555	Games for Change
COMM 3201	Health Communication
EXSC 1120	Introduction to Exercise, Fitness, and Health
EXSC 4500 and EXSC 4501	Exercise Physiology 1 and Lab for EXSC 4500
EXSC 5200	Cardiopulmonary Physiology
EXSC 5220	Advanced Exercise Physiology
HSCI 1105	Human Nutrition
HSCI 1106	Contemporary Issues in Nutrition
HSCI 2350	Advanced Nutrition in Health and Disease
HSCI 2500	Public Health Nutrition in the Community
PSYC 1250	Drugs and Behavior
Digital Health	
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum
DS 4200	Information Presentation and Visualization
HINF 5101	Introduction to Health Informatics and Health Information Systems
HINF 5200	Theoretical Foundations in Personal Health Informatics
HINF 5300	Personal Health Interface Design and Development
IS 2000	Principles of Information Science
IS 4800	Empirical Research Methods
Health Data Science	
ANTH 3410	Ethnographic Field Experience
ARCH 5312	Mapping and Building Health
INSH 5304	Social Network Analysis
PHIL 3065	Bioethics in the Age of Big Data
PHTH 3250	Fundamentals of Qualitative Research
PHTH 5202	Introduction to Epidemiology
POLS 2399	Research Methods in Political Science

Capstone Requirement

Code	Title	Hours
Health Science Capstone		
Complete capstone through a capstone course, a capstone project, or through an Honors Project.		3-4
Capstone Course Options		
HINF 5301	Evaluating Health Technologies	
PHTH 4515	Critical Issues in Health and Public Health Policy	
PHTH 4616	Addressing Rural Health Inequities	
PHTH 5214	Environmental Health	
PHTH 5230	Global Health	
PHTH 5236	Food, Nutrition, and Health	
PHTH 5603	Qualitative Methods	
Capstone Project Options		

HSCI 4720	Health Science Capstone—Service (must complete 0-credit HSCI 4700 as pre-requisite)
HSCI 4730	Health Science Capstone—Research (must complete 0-credit HSCI 4700 as pre-requisite)
Honors Project Option	
Must meet GPA requirement and complete both courses:*	
HSCI 4970 and HSCI 4971	Junior/Senior Honors Project 1 and Junior/Senior Honors Project 2

*HSCI 4970 will count as 4 semester hours toward general electives.

Other Major Requirements

Code	Title	Hours
HSCI 1000	College: An Introduction	1
HSCI 2000	Professional Development for Bouvé Co-op	1
ENGW 1111	First-Year Writing	4
ENGW 3306	Advanced Writing in the Health Professions	4
PHIL 1165	Moral and Social Problems in Healthcare	4

Electives

Code	Title	Hours
Complete a minimum of 41 semester hours of general electives. Total elective semester hours required to meet degree completion requirement will depend on student's choice of selectives above.		41

Health Science Major Requirement

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

Academic Policies and Procedures

Please visit Bouvé College of Health Sciences Undergraduate page (https://catalog.northeastern.edu/undergraduate/health-sciences/) for academic policies and procedures, including Academic Appeals (https://catalog.northeastern.edu/undergraduate/academic-policies-procedures/academic-appeals-policies-procedures/).

Program Requirement

132 total semester hours required

Plan of Study
Sample Plan of Study: Four Years, Two Co-ops in Summer2/Fall

Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HSCI 1000	1	PSYC 1101	4	Elective	4	Vacation	
PHTH 1260	4	Elective	4	PHTH core course	4		
MATH 1241	4	BIOL 1113 and BIOL 1114	5				
BIOL 1111 and BIOL 1112	5	CHEM 1161 and CHEM 1162 and CHEM 1163	5				
ENGW 1111	4						
	18		**18**		**8**		**0**

Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHTH core course	4	HSCI 2000	1	Elective	4	Co-op	0
Electives	8	PHTH 2210	4	PHTH core course	4		
PHIL 1165	4	Electives	12				
	16		**17**		**8**		**0**

Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3306	4	Elective or selective	4	Co-op	0
Elective or selective	4	Elective or selective	4	PHTH core course	8		4

	Hours		Hours		Hours		Hours
		PHTH core course	4				
	4		**16**		**8**		**0**

Year 4

Fall	Hours	Spring	Hours
Co-op	0	Capstone course	4
Elective or selective	4	PHTH core course	4
		Elective or selective	8
	4		**16**

Total Hours: 133

Four Years, Two Co-ops in Spring/Summer 1

Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HSCI 1000	1	BIOL 1113	4	PHTH core course	4	Vacation	
PHTH 1260	4	BIOL 1114	1	Elective	4		
PSYC 1101	4	MATH 1241	4				
BIOL 1111	4	Elective	4				
BIOL 1112	1	CHEM 1161	4				
ENGW 1111	4	CHEM 1162	1				
		CHEM 1163	0				
	18		**18**		**8**		**0**

Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HSCI 2000	1	Co-op	0	Co-op	0	PHIL 1165	4
PHTH 2210	4	Elective	4			PHTH core course	4
PHTH core course	4						
Electives	8						
	17		**4**		**0**		**8**

Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 3306	4	Co-op	0	Co-op	0	Elective or selective	4
Elective or selectives	8	Elective or selective	4			PHTH core course	4
PHTH core course	4						
	16		**4**		**0**		**8**

Year 4

Fall	Hours	Spring	Hours
PHTH core course	4	Electives or selectives	16
Elective or selectives	8		
Capstone course	4		
	16		**16**

Total Hours: 133

[1] Credit count of selective/elective is dependent on credit count of selective/elective in same term to avoid unintended credit overload.