

Spring 2027 Neuroscience Course Directory

Boston University College of Arts and Sciences
Undergraduate Program in Neuroscience

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RESEARCH FOR UNITS

If you are working or intend to work in a lab during the Spring 2027 semester, you are welcome to apply for a research-for-units class in order to receive academic credits towards graduation. Guidelines and the application will be available here: <https://www.bu.edu/upn/undergraduate-research/>

REGISTRATION DATES

Class Year	Start Date	Start Time
Seniors	October 30th	6:20a
Juniors	November 6th	6:20a
Sophomores	November 13th	6:20a
Freshmen	November 20th	6:20a

WAITLISTS

You can find more information about waitlists here:

<https://www.bu.edu/upn/advising/undergraduate-waitlists/>

REGISTRATION NOTES

- You **must** schedule an advising appointment with your **assigned advisor/faculty mentor** prior to registration through MyBU or other designated scheduling method provided by your advisor/mentor.
- Full time status is a minimum of **12 units** per semester.
- CAS Advising Forms: <http://www.bu.edu/cas/current-students/undergraduate/casadvising/forms/>
- PDP, ROTC, and CAS FY/SY courses **do not** count toward the 128 units needed to graduate.
- Find more advising resources for the Neuroscience Program at <https://www.bu.edu/upn/advising/advising-forms-documents/>
- Learn more about the BU Hub at bu.edu/hub
- Declare a second major, change your major, or add a minor here:
Major: <https://www.bu.edu/cas/cas-advising-major-declaration-form/> Minor:
<https://www.bu.edu/cas/academics/undergraduate-education/academic-advising/advising/minor-declaration-form/>
- View Enrollment Dates/Times here: <https://www.bu.edu/reg/calendars/registration/>
- [Course Planning & Preparing for Registration](#)
- Registration Tips & Tricks:
<https://www.bu.edu/cas/academics/undergraduate-education/academic-advising/advising/course-planning-registration/registration-tips-tricks/>

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Continue to check MyBU Student for most up to date scheduling information.

Core Neuroscience Courses

Boston University College of Arts and Sciences
Undergraduate Program in Neuroscience

NE 101: Introduction to Neuroscience

4 cr | Hub: SI1 | Prereq: None

An introduction to the biological basis of behavior and cognition. Includes theoretical and practical foundations rooted in psychology, biology, neuropharmacology, and clinical sciences (e.g., neurology and neuropsychiatry). Neuroethical dilemmas are highlighted and integrated when relevant to discussion topics. Note: You cannot receive credit for NE 101 and PS 231.

Lecture

A1	Bushell	MWF	10:10a-11:00a
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Discussion

B1	Bushell	W	9:05a-9:55a
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NE 102: Introduction to Cellular and Molecular Biology

4 cr | Hub: SI2; ETR; TWC; WIN

An introductory class examining the molecular and cellular mechanisms that govern a cell's life, including mechanisms of neuronal function and disease. Project labs are intertwined with lectures and focus on experimental modeling of Alzheimer's disease. Effective Fall 2018, this course fulfills a single Hub unit in each of the following BU Hub areas: Scientific Inquiry II, Ethical Reasoning, Writing-Intensive Course, Teamwork/Collaboration.

Lecture

A1	Pastorino	MWF	1:25p-2:15p
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Lab

L1	Staff	M	5:30p-9:15p
L2	Staff	T	8:00a-11:45a
L3	Staff	T	12:30p-4:15p
L4	Staff	T	12:30p-4:15p
L5	Staff	T	5:30p-9:15p
L6	Staff	W	8:00a-11:45a
L7	Staff	W	5:30p-9:15p
L8	Staff	R	8:00a-11:45a
L9	Staff	R	12:30p-4:15p
LA	Staff	R	12:30p-4:15p
LB	Staff	T	5:30p-9:15p
LC	Staff	F	8:00a-11:45a

NE 202: Intro. to Cognitive Neuroscience

4 cr | Prereq: CAS NE 101 or PS 231; sophomore standing

Cognitive neuroscience seeks to understand the brain basis of cognition. This course introduces research methods and human neuroanatomy, and provides a survey of topics including learning and memory, attention, perception, language, social cognition, and executive function. Also offered as CAS PS 339.

Lecture

A1	Somers	TR	2:00p-3:15p
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Discussion

A2	Staff	W	9:05a-9:55a
A3	Staff	W	10:10a-11:00a
A4	Staff	W	11:15a-12:05p
A5	Staff	W	12:20p-1:10p

Core Neuroscience Courses

Boston University College of Arts and Sciences
Undergraduate Program in Neuroscience

NE 204: Intro. to Computational Models of Brain and Behavior

4 cr | Prereq: CAS MA 121 and MA 122; or CAS MA 123 and CAS MA 124; or NE 212 and sophomore standing; or consent of instructor

Introduction to important concepts in cognitive neuroscience and computational modeling of biological neural systems. Combines a systems-level overview of brain function with an introduction to modeling of brain and behavior using neural networking.

Lecture

A1	Yazdanbakhsh	TR	3:30p-4:45p
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Discussion

B1	Yazdanbakhsh	F	10:10a-11:00a
B2	Yazdanbakhsh	F	2:30p-3:20p
B3	Yazdanbakhsh	F	3:35p-4:25p
B4	Yazdanbakhsh	F	4:40p-5:30p
B5	Yazdanbakhsh	F	10:10a-11:00a
B6	Yazdanbakhsh	F	2:30p-3:20p
B7	Yazdanbakhsh	F	3:35p-4:25p
B8	Yazdanbakhsh	F	4:40p-5:30p

NE 212: Intro to MATLAB Programming

4 cr | Hub: QR1, CRT | Prereq: (NE 101 or PS 101) & one semester of calculus

Teaches computer programming concepts, core statistical concepts, and related skills via MATLAB. Programming examples that cover four steps of neuroscience research (experiment control; random samples; data analysis; brain process simulation) promote "constructive" understanding of the quantitative reasoning behind decisions based on descriptive and inferential statistics (e.g., confidence intervals, linear regression models, model-specific anovas). Explains numerical integration programs in two settings: probability distributions, and simulations of neural dynamics.

Lecture

A1	Chandrasekaran	TR	3:30p-4:45p
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Discussion

B1	Chandrasekaran	W	10:10a-11:00a
B2	Chandrasekaran	W	2:30p-3:20p
B3	Chandrasekaran	W	3:35p-4:25p
B4	Chandrasekaran	W	4:40p-5:30p

Group 1: Neurobiology

NE 293: Methods in Cell and Molecular Neurobiology

4 cr | Hub: CRI, ETR, OSC | Prereq: (NE 102 or BI 108) or equivalent, and (NE 203 or BI 325) or equivalent

This course introduces key techniques used in neurobiology research and their application to real scientific questions in a dry-lab setting. Through literature analysis, case studies, and mock research proposals, students learn to evaluate experimental design and assess the feasibility of different approaches. By the end of the course, students have a solid foundation in neurobiological methods and the critical thinking skills needed to select the most appropriate techniques for specific research goals.

NE 460: Neuroscience Enquiry Lab

4 cr | Prereq: (NE 23 or BI 325) or consent of instructor

An introduction to neuroscience research that emphasizes learning how to design and perform experiments. Through lectures and integrated labs, students gain hands-on experience using Python to access open-source datasets and explore concepts such as brain activity, connectivity and behavior.

NE 481: Molecular Biology of the Neuron

4 cr | Hub: OSC, SI2, RIL | Prereq: (NE 102 or BI 203) or equivalent

Topics include electrical properties of neurons, a survey of neurotransmitters, molecular structure and function of receptors, synaptic transmission, intracellular signaling, and the molecular biology of sensory transduction. Three hours lecture, one hour discussion. Also offered as CAS BI 481.

Boston University College of Arts and Sciences
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Independent

A1 Pastorino MW 8:00a-9:45a

Independent

A1 Thompson TR 3:30p-5:15p

Independent

A1 Chantranupong MW 2:30p-4:15p

Group 1: Neurobiology

Boston University College of Arts and Sciences
Undergraduate Program in Neuroscience

NE 512: Neurogenetics

4 cr | Prereq: NE 203 or BI 325, and general chemistry sequence.

Students will gain conceptual understanding of the contributions of genes and epigenetics to various behaviors and neuropathologies. The subject will be explored through various approaches such as behavioral genetics research, genetic inheritance and epigenetics, candidate gene approaches, animal studies, and other approaches such as genome-wide association studies (GWAS). In addition to basic physical behaviors, students will explore psychiatric disorders, and will conduct literature research regarding the genetic basis of behaviors/pathologies of interest.

Independent

A1	Tullai	TR	12:30p-1:45p
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NE 556: Drug Discovery in Neuroscience

4 cr | Hub: DME, SI2, CRI | Prereq: NE 102 (or BI 108) & CH 203; NE/PS 333 strongly recommended.

The process of drug discovery is complex especially when a drug is intended to treat a neurological disease. This discussion-heavy course examines the specific challenges of modern neuroscience drug discovery, including: target selection, pharmacodynamics, animal models, and clinical trials. Effective Fall 2021, this course fulfills a single unit in each of the following BU Hub areas: Digital/Multimedia Expression, Scientific Inquiry II, Creativity/Innovation.

Independent

A1	Bushell	MW	12:20p-2:05p
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NE 557: Neurobiology of Disease- From Molecules to Circuits

4 cr | Prereq: BI 203 and (NE 203 or BI 325).

Reviews recent topics and readings in the field of neurodegeneration that span disorders affecting neurodevelopment, diseases of the peripheral and central nervous system to immune-related diseases affecting the nervous system and finally disorders of higher function such as addiction, sleep disorders and schizophrenia. Specifically, this advanced course will investigate the molecular and cellular basis of brain disorders and how these disruptions affect neuronal circuits. Lectures integrate foundational concepts with emphasis on experimental approaches used to study these disorders, including genetic models, imaging, transcriptomics and proteomics, and electrophysiology.

Independent

A1	Ho	MW	10:10a-11:55a
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Continue to check MyBU Student for most up to date scheduling information.

Group 2: Cognitive

Boston University College of Arts and Sciences
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NE 234: Psychology of Learning

4 cr | Hub: SI1, SO1, CRT | Div Studies: SS | Prereq: PS 101

The aim of this course is to review the major traditional and current theories of learning and memory. Students will begin with an understanding of simple learning, including theories and basic principles of classical and operant conditioning. Students will then be introduced to the memory system, the three stages of memory, implicit and explicit memory processes.

Lecture

A1	Dunne	MWF	2:30p-3:20p
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Discussion

A2	Dunne	W	8:00a-8:50a
A3	Dunne	W	9:05a-9:55a
A4	Dunne	W	10:10a-11:00a
A5	Dunne	W	11:15a-12:05p

NE 323: Experimental Psychology: Learning

4 cr | Prereq: PS 101, PS/NE 234, & (PS211 or NE 212 or (MA 115 & MA 116)) | Satisfies [Neuro Research Requirement](#)

Methodology, results, and interpretation of respondent and operant conditioning. Experimental analyses of selected topics in learning within the context of reinforcement theory. Required reports of instructor- planned and student-planned experiments using a virtual rat. Also offered as CAS PS 323.

Independent

A1	Meyer	TR	1:30p-3:15p
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NE 327: Experimental Psychology: Perception

4 cr | Prereq: PS 101 & (PS211 or NE 212 or (MA 115 & MA 116)) & PS 222 | Satisfies [Neuro Research Requirement](#)

Introduces psychophysical methods and their use in the study of perceptual processes: Students learn to think critically about the relation between theory and experiment, conduct perception experiments, and write experimental reports. Also offered as CAS PS 327.

Independent

A1	Ling	TR	9:00a-10:45a
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Group 2: Cognitive

Boston University College of Arts and Sciences
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NE 333: Drugs & Behavior

4 cr | Prereq: PS 101 & (PS 231 or NE 101) & Junior/Senior Standing

Comprehensive survey of drug influences on behavior; introduces a neuroscience approach to behavior. Several classes of drugs are discussed, including abused and addictive substances and psychoactive and therapeutic agents. Also offered as CAS PS 333.

Lecture

A1	DiBenedictis	MWF	12:20p-1:10p
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Discussion

A2	TBA	F	8:00a-8:50a
A3	TBA	F	9:05a-9:55a
A4	TBA	F	10:10a-11:00a
A5	TBA	F	11:15am-12:05p

Lecture

B1	Jordan	TR	3:30p-4:45p
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Discussion

B2	TBA	W	9:05a-9:55a
B3	TBA	W	10:10a-11:00a
B4	TBA	W	11:15a-12:05p

Lecture

C1	DiBenedictis	MWF	1:25p-2:15p
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Discussion

C2	TBA	W	12:20p-1:10p
C3	TBA	W	2:30p-3:20p
C4	TBA	W	3:35p-4:25p

NE 521: Animal Models in Behavioral Neuroscience

4 cr | Prereq: junior standing and either CAS PS 231 or CAS NE 101. Strongly recommended: CAS NE 102 and either CAS PS 337 or PS 338.

Examines the modern behavioral approaches and wide range of species across the animal kingdom used to model human behavior and neural function. Lectures present background material, and students lead discussion of primary research articles. Also offered as CAS PS 521.

Independent

A1	Scott	F	11:15a-2:00p
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Group 2: Cognitive

Boston University College of Arts and Sciences
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NE 531: Imaging and Manipulating Memories

4 cr | Prereq: PS 231 or NE 101 or PS/NE 327 or PS 339/NE 202 or NE 203/BI 325 or permission of instructor

The nature of memory engrams, the physical manifestations of experiences in the brain, will be explored at the systems neuroscience level by surveying primary literature.

Independent

A1 Ramirez TR 11:00a-12:15p

NE 532: Neurobiology of Motivation, Decision Making, and Learning

4 cr | Prereq: PS 231 or NE 101, and PS 211 or PS/NE 212; and one upper level NE course or BI 108 and BI 325; or consent of instructor

Exploration of the molecular and neural circuit mechanisms responsible for driving movement, selecting actions, and evaluating outcomes to drive adaptive learning. Examination of how disorders of motivation and decision making arise from the disruption of different neural circuits. Also listed as PS 532.

Independent

A1 Howe R 12:30p-3:15p

Group 3: Computational

Boston University College of Arts and Sciences
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NE 530: Neural Models of Memory Function

4 cr | Prereq: a course in Neuroscience or physiological psychology, or consent of instructor

Computational models of neurobiological mechanisms for memory function and spatial navigation, with a particular emphasis on cellular and circuit models of the hippocampus and related cortical structures. Also offered as CAS PS 530.

Independent

A1	Hasselmo	R	3:30p-6:15p
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CS 542: Machine Learning

4 cr | Prereq: CS 365 | Satisfies [Neuro Research Requirement](#)

Introduction to modern machine learning concepts, techniques, and algorithms. Topics include regression, kernels, support vector machines, feature selection, boosting, clustering, hidden Markov models, and Bayesian networks. Programming assignments emphasize taking theory into practice, through applications on real-world data sets.

Lecture

A1	Considine	MW	2:30p-3:45p
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Lab

B1	Considine	F	1:25p-2:15p
B2	Considine	F	2:30p-3:20p
B3	Considine	F	3:35p-4:25p

MA 242: Linear Algebra

4 cr | Hub: QR2, CRT | Prereq: (CASMA122 OR CASMA124 OR CASMA127 OR CASMA129)

Cannot be taken for credit in addition to CAS MA 442 or ENG EK 103. Matrix algebra, solution of linear systems, determinants, Gaussian elimination, fundamental theory, row-echelon form. Vector spaces, bases, norms. Computer methods. Eigenvalues and eigenvectors, canonical decomposition. Applications. Effective Fall 2019, this course fulfills a single unit in the following BU Hub area: Quantitative Reasoning II.

Lecture

A1	Chang	TR	9:30a-10:45a
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Discussion

Please see MyBU Student for available discussion times.

Lecture

B1	Fried	MWF	9:05a-9:55a
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Discussion

Please see MyBU Student for available discussion times.

Lecture

C1	Kothari	TR	2:00p-3:15p
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Discussion

Please see MyBU Student for available discussion times.

Group 3: Computational

Boston University College of Arts and Sciences
Undergraduate Program in Neuroscience

MA 565: Mathematical Models in the Life Sciences

4 cr | Prereq: MA226 or MA 231

An introduction to mathematical modeling, using applications in the biological sciences. Mathematics includes linear difference and differential equations, and an introduction to nonlinear phenomena and qualitative methods. An elementary knowledge of differential equations and linear algebra is assumed.

Independent

A1	Isaacson	TR	11:00a-12:15p
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CN 530: Neural and Computational Models of Vision

4 cr | Prereq: CN 510 or consent of instructor

Current models of mammalian visual processes are constrained by experimental and theoretical results from psychology, physiology, computer science, and mathematics. The course evaluates the explanatory adequacy of competing neural and computational models of such processes as edge detection, textural grouping, shape-from-shading, stereopsis, motion detection, and color perception. Students perform computer simulations of some of the examined models.

Lecture

A1	Yazdanbakhsh	MW	10:10a-11:55a
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CDS DS 340: Introduction to Machine Learning and AI

4 cr | Hub: ETR, QR2, CRT | Prereq: CDS DS 320

This course instructs students in key algorithms for classic artificial intelligence (AI) and modern machine learning (ML). Along the way, we seek to explore what kinds of problems these techniques are good and bad at, and build intuition for what makes a good search or machine learning problem. The primary assessment tools will be programming problem sets in Python, using Jupyter notebooks.

Lecture

A1	Gold	TR	3:30p-4:45p
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Discussion

A2	Gold	W	1:25p-2:15p
A3	Gold	W	2:30p-3:20p

Lecture

B1	Gold	TR	2:00p-3:15p
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Discussion

B2	Gold	M	9:05a-9:55a
B3	Gold	M	10:10a-11:00a

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Continue to check MyBU Student for most up to date scheduling information.

Restricted Electives

Boston University College of Arts and Sciences
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BI 203: Cell Biology

4 cr | Hub: SI1, QR1, CRT | Prereq: (CASBI108 & CASCH102) or equivalent | Coreq: (CASCH203) or equivalent.

Principles of cellular organization and function: biological molecules, flow of genetic information, membranes and subcellular organelles, and cell regulation. Three hours lecture, one hour discussion. Students may receive credit for CAS BI 203 or 213, but not both courses. Effective Fall 2019, this course fulfills a single unit in each of the following BU Hub areas: Scientific Inquiry I, Quantitative Reasoning I, Critical Thinking.

Lecture

A1	TBA	MWF	1:25p-2:15p
Discussion			
B1	TBA	W	12:20p-1:10p
B2	TBA	W	3:35p-4:25p
B3	TBA	W	4:40p-5:30p
B4	TBA	F	8:00a-8:50a
B5	TBA	F	11:15a-12:05p
B6	TBA	F	2:30p-3:20p

BI 315: Systems Physiology

4 cr | Hub: SI2, WIN, CRT, TWC | Prereq: (CASBI108 OR ENGBE209), and CASCH101 and CASCH102, or equivalent. First Year Writing Seminar (e.g., WR 100 or WR 120)

An introduction to physiological principles applied across all levels of organization (cell, tissue, organ system). Preparation for more advanced courses in physiology. Topics include homeostasis and neural, muscle, respiratory, cardiovascular, renal, endocrine, gastrointestinal, and metabolic physiology. Three hours lecture, three hours lab. Effective Fall 2019, this course fulfills a single unit in each of the following BU Hub areas: Scientific Inquiry II, Writing-Intensive Course, Critical Thinking, Teamwork/Collaboration.

Lecture

A1	Muscedere	MWF	11:15a-12:05p
A2	Muscedere	MWF	12:20p-1:10p

Lab

Please see MyBU Student for available lab times.

CS 111: Introduction to Computer Science I

4 cr | Hub: QR2, CRI, CRT

The first course for computer science majors and anyone seeking a rigorous introduction. Develops computational problem-solving skills by programming in the Python language, and exposes students to a variety of other topics from computer science and its applications. Carries MCS divisional credit in CAS. Effective Fall 2018, this course fulfills a single unit in each of the following BU Hub areas: Quantitative Reasoning II, Creativity/Innovation, Critical Thinking.

Lecture

A1	Sullivan	MWF	12:20p-1:10p
A2	Sullivan	MWF	1:25p-2:15p

Lab

Please see MyBU Student for available lab times.

Restricted Electives

Boston University College of Arts and Sciences
Undergraduate Program in Neuroscience

CS 112: Introduction to Computer Science II

4 cr | Hub: QR2, CRI, CRT | Prereq: (CASC5111) or equivalent.

Covers advanced programming techniques and data structures. Topics include recursion, algorithm analysis, linked lists, stacks, queues, trees, graphs, tables, searching, and sorting. Carries MCS divisional credit in CAS. Effective Fall 2018, this course fulfills a single unit in the following BU Hub area: Quantitative Reasoning II, Creativity and Innovation, Critical Thinking.

Lecture

A1	Narayanan	TR	2:00p-3:15p
A2	Narayanan	TR	3:30p-4:45p

Lab

Please see MyBU Student for available lab times.

A2-A7	Papadakis-Ka
B2-B7	Papadakis-Ka

MA 226: Differential Equations

4 cr | Hub: CRT | Prereq: (CASMA225 OR CASMA230)

First-order linear and separable equations. Second-order equations and first-order systems. Linear equations and linearization. Numerical and qualitative analysis. Laplace transforms. Applications and modeling of real phenomena throughout. (Cannot be taken for credit in addition to CAS MA 231.)

Lecture

A1	Goh	MWF	10:10a-11:00a
B1	Lin	TR	9:30a-10:45a
C1	Goh	MWF	9:05a-9:55a

Discussion

Please see MyBU Student for discussion times.

A2-A6	TBA
B2-B6	TBA
C2-C6	TBA

MA 416: Analysis of Variance

4 cr | Hub: CRT | Prereq: (CASMA116 OR CASMA214) or equivalent.

Fundamental concepts and analytical skills in analysis of variance, including crossed and nested designs, as well as fixed- and random- effect models. Trend analysis for repeated measures, expected mean squares, and non-parametric techniques. SAS is used throughout the course.

Lecture

A1	Moore	TR	5:00p-6:15p
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Discussion

A2	TBA	W	1:25p-2:15p
A3	TBA	W	3:35p-4:25p
A4	TBA	R	12:30p-1:20p

Restricted Electives

CDS DS 110: Introduction to Data Science with Python

4 cr

CDS DS 110 is the first in a two-course sequence (leading to CDS DS 210) that builds students' competence in computing techniques central to data science. Students will use Python to explore fundamental CS concepts and processes used in data science with a focus on descriptive data analysis, including data structures, development of functions and more advanced recursion, object-oriented programming, data processing and data visualization. Numpy, pandas, and matplotlib will be used to analyze real-world data. Prior experience with Python is not required.

CDS DS 210: Programming for Data Science

4 cr | Hub: QR2, DME, CRI | Prereq: DS 110 or equivalent

Second course in the CDS DS-110-210 sequence. The first half of DS 210 continues the Python programming experience begun in DS-110, with enhanced focus on machine learning applications. The second half of the course introduces students to compiled programming languages, such as Rust, Go and Java, suitable for building large projects. Basic data structures (stacks, queues, priority queues, binary search trees), techniques for representing graphs, and basic graph algorithms will be explored. Concepts are developed and reinforced through consideration of data-driven inquiries in real-world settings.

ENG EK 125: Intro Programming for Engineer

4 cr | Hub: QR1, CRI | Corequisite: MA 123

An introduction to programming concepts and modern computational environments used to solve engineering problems. Basic procedural programming concepts including input/output, selection, looping, functions, data structures (arrays, strings, structures), pointers, and memory management. Introduction to statistics, data science, and machine learning. Emphasis on programming style, debugging, top-down design and modular code. Introduction to a command line interface and a high-level language.

Boston University College of Arts and Sciences
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Lecture

A1	Gold	MWF	12:20p-1:10p
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Discussion

Please see MyBU Student for Discussion times.

A2-A5	Gold
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Lecture

A1	Dak Albab	TR	9:30a-10:45a
B1	Dak Albab	TR	11:00a-12:15p

Discussion

Please see MyBU Student for Discussion times.

Lecture

A1	TBA	MW	9:05a-9:55a
		F	4:30p-6:15p
A2	TBA	MW	10:10a-11:00a
		F	4:30p-6:15p
A3	TBA	MW	11:15a-12:05p
		F	4:30p-6:15p

Discussion and Lab

Please see MyBU Student for Discussion and Lab times.

Last Updated: 10/01/2026

Continue to check MyBU Student for most up to date scheduling information.

Remaining on track to complete your Hub requirements requires thoughtful planning, including knowing what Hub units you will satisfy by courses needed for your major.

Students majoring in Neuroscience who complete the core neuroscience courses and foundational requirements in writing, chemistry, physics, calculus, and statistics *generally* have **11 Hub requirements** left to satisfy:

Philosophical Inquiry and Life's Meaning (PLM)	1 requirement
Aesthetic Exploration (AEX)	1 requirement
Historical Consciousness (HCO)	1 requirement
Social Inquiry (SO1)	1 requirement
Individual in Community (IIC)	1 requirement
Global Citizenship and Intercultural Literacy (GCI)	2 requirements
Creativity/Innovation (CRI)	2 requirements
Oral/Signed Communication (OSC)	1 requirement
Digital Multimedia Expression (DME)	1 requirement

You may satisfy some of the above requirements with your 5 neuroscience electives, writing courses, 2nd language requirement, and additional academic tracks (minors, pre-health, KHC, etc.), but you will likely need to search outside your normal scheduling path to satisfy at least some Hub requirements.

It is encouraged to spread your Hub courses throughout your time at Boston University, so that you are not scrambling to take all your Hub courses or find seats in courses that meet a specific permutation of 3 Hub requirements your final year.

You can also filter by specific hub requirements when searching for courses in MyBU Student.

We've included a list of courses on the next page running in Spring 2027 that are helpful in satisfying some of your Hub requirements that are not met by Neuroscience. **This list is by no means exhaustive and you should continue to do your own research, including looking at classes outside of CAS.**

Select Hub Courses

Boston University College of Arts and Sciences
Undergraduate Program in Neuroscience

AH 112: Introduction to Art History II: Renaissance to Today

4 cr | Hub: AEX, HCO, TWC |

Major monuments and artists. Sequential development, from the Renaissance to the modern period, of major styles in architecture, sculpture, painting, graphic arts, and photography. Relationship of visual art to social and cultural trends.

AH 113: Arts and Monuments of Asia

4 cr | Hub: OSC, AEX

An introduction to the art and architecture of Asia from the earliest times to the present. Course addresses not only important cultural monuments but also portable art objects within museum collections. Course examines a wide range of media, including ink painting, ceramics, textiles, photography, as well as major architectural projects, monuments, and built environments. It aims to challenge and rethink monolithic definitions of "Asian art" by allowing students to understand the complex and sophisticated processes of interregional and global cultural exchange.

AN 101: Introduction to Sociocultural Anthropology

4 cr | Hub: GCI, RIL, SO1

Introduction to the basic concepts, principles, and problems of sociocultural anthropology, emphasizing the study of traditional and complex societies. Special attention to the organization and meaning of religion, economic life, kinship and political order; and the problem of cultural variation in the contemporary world. Carries social science divisional credit in CAS.

AN 102: Human Biology, Behavior, and Evolution

4 cr | Hub: HCO, CRT, SI1

Introduces basic principles of evolutionary biology, human origins, genetics, reproduction, socio-ecology, and the evolution of primate and human behavior and adaptations. Section activities include examination of fossil and skeletal material, and hands-on projects involving human and primate behavior and biology.

AR 100: Archaeology Today

4 cr | Hub: CRT, ETR, HCO

Illustrated lectures focus on the important discoveries of the discipline in archaeology. Course covers the whole of human prehistory around the world. Archaeological methods are described, along with the great ancient sites: Olduvai, Lascaux, Stonehenge, Egyptian pyramids, Machu Picchu.

BI 210: Human Anatomy

4 cr | Hub: SI1, DME, CRI

Intensive preprofessional course for students whose programs require anatomy. Not for biology major or minor credit. Gross structure of the human body; skeletal, muscular, nervous, respiratory, circulatory, digestive, urinary, and reproductive systems. Three hours lecture, two hours lab (lab requires dissection). Cannot be taken for credit in addition to the course with the same title formerly numbered CAS BI 106.

Select Hub Courses

Boston University College of Arts and Sciences
Undergraduate Program in Neuroscience

CL 101: The World of Greece

4 cr | Hub: HCO, PLM, CRT |

The literature, philosophy, art, and culture of ancient Greece and their impact on the Western tradition. Topics covered include the emergence of epic poetry; art and lyric in the Archaic Age; drama, architecture, philosophy, and political developments of classical Athens and Greece.

EN 142: Introduction to Poetry

4 cr | Hub: AEX, OSC |

Introduction to the understanding, interpretation, and appreciation of a wide range of poetry. Focus on poetic form, genre, and style, with explorations of cultural and aesthetic contexts. Particular emphasis on close, careful reading and discussion. Topics vary by instructor.

EN 127: Reading American Literature

4 cr | Hub: AEX, IIC | PreReq: WR 120 or First-Year Writing Seminar

Readings may include works of fiction, poetry, or drama composed in America from the colonial period to the present. Attention to a wide range of literary works and historical and cultural contexts

EN 170: The Graphic Novel

4 cr | Hub: AEX, DME, CRI |

Examination of the rise, nature, and status of the contemporary book-length graphic novel. Topics include graphic vs. traditional novel, word and image, style and space, representations of subjectivity, trauma, and history.

EN 129: Introduction to African American Literature

4 cr | Hub: WIN, GCI, CRT |

What is the African American literary tradition? How does it change over time? This course is to introduce you to the cultural, political, and historical contexts of the African American experience through readings of literature. We will read poetry, slave narratives, essays and speeches, tales, short stories, and novels, and as we examine these texts, we will consider how culture, politics, and history shape African American literature. Effective Fall 2022, this course fulfills a single unit in each of the following: Writing-Intensive, Global Citizenship and Intercultural Literacy, Critical Thinking.

HI 190: History of Boston: Community and Conflict

4 cr | Hub: HCO, IIC, TWC |

Explores the history of Boston and the city's changes over time. Students work with archival objects, maps, and manuscripts. Topics include Native American history, colonial settlement, revolution, immigration, urban development, and race. Students visit nearby historical sites and museums.

Select Hub Courses

Boston University College of Arts and Sciences
Undergraduate Program in Neuroscience

HI 191: What is Europe?

4 cr | Hub: DME, GCI, TWC

Explores key moments in history when cultural contact prompted Europeans to reconsider how they defined themselves culturally and geographically. Lectures and discussions are combined with trips to local museums/archives to analyze the material remains of this process of self-definition.

PH 100: Introduction to Philosophy

4 cr | Hub: PLM, ETR, CRT |

Introduces the nature of philosophical activity through careful study of major philosophical topics. Topics may include the nature of reality, knowledge, God's existence, and the significance of human life. Carries humanities divisional credit in CAS.

PH 150: Introduction to Ethics

4 cr | Hub: ETR, PLM, CRT |

This is an introduction to what morality is, how we should live, and how to reason well about ethical questions. We examine major ethical debates and frameworks, as well as concrete moral problems. Improve your reading, writing, and thinking skills.

SO 207: Sociology of Race and Ethnicity

4 cr | Hub: HCO, IIC, RIL |

This course examines the fundamental theoretical and empirical approaches regarding race/ethnicity and the current state of race relations in the U.S. that explore both contemporary social problems.

RN 103: Religions of Asia

4 cr | Hub: AEX, GCI, TWC

Study of Hinduism, Buddhism, Daoism, Confucianism, and Shinto. Focus on the world view of each tradition and the historical development of that world view. Effective Fall 2018, this course fulfills a single unit in each of the following BU Hub areas: Global Citizenship and Intercultural Literacy, Historical Consciousness, Critical Thinking. Effective Fall 2023, this course fulfills a single unit in each of the following BU Hub areas: Global Citizenship and Intercultural Literacy, Aesthetic Exploration, Teamwork/Collaboration.

RN 106: Death and Immortality

4 cr | Hub: PLM, GCI, CRI

Examines death as religious traditions have attempted to accept, defeat, deny, or transcend it. Do we have souls? Do they reincarnate? What to do with a corpse? Other topics include mourning, burial, cremation, martyrdom, resurrection, near-death experiences.