Augustana College

Neuroscience

Courses required for the first year: None

Courses recommended for the first year: PSYC 200 Introduction to Neuroscience CHEM 131-132 and MATH 160 are also great for establishing a basic science foundation.

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The Major in Neuroscience

Required Courses

Course Name	Learning Perspective/ Suffix	Prerequisites	Usually offered: F, J, SP, SU*	Credits
Introduction to Neuroscience			Once or twice each year	4
Statistics	Q	*see below	F, SP	4
Research Methods		PSYC 100 or PSYC 200, AND PSYC 240 *see below	F, SP	4
Advanced Seminar in Neuroscience		PSYC 200 AND PSYC 246	offered once per year, usually F	4
Methods in Neuroscience		PSYC 200 AND PSYC 246	J	4
Senior Inquiry		PSYC 246	F, SP	4
	Introduction to Neuroscience Statistics Research Methods Advanced Seminar in Neuroscience Methods in Neuroscience	Perspective/ SuffixIntroduction to NeuroscienceStatisticsQResearch MethodsAdvanced Seminar in NeuroscienceMethods in NeuroscienceMethods in Neuroscience	Perspective/ SuffixIntroduction to NeuroscienceStatisticsQ*see belowStatisticsQ*see belowResearch MethodsPSYC 100 or PSYC 200, AND PSYC 240 *see belowAdvanced Seminar in NeurosciencePSYC 200 AND PSYC 246Methods in NeurosciencePSYC 200 AND PSYC 246	Perspective/ Suffixoffered: F, J, SP, SU*Introduction to NeuroscienceOnce or twice each yearStatisticsQ*see belowF, SPResearch MethodsPSYC 100 or PSYC 200, AND PSYC 240 *see belowF, SPAdvanced Seminar in NeurosciencePSYC 200 AND PSYC 246offered once per year, usually FMethods in NeurosciencePSYC 200 AND PSYC 246J

Additional Courses

Choose one neuroscience elective

- PSYC 342 Cognition (PSYC 246 prereq)
- PSYC 343 Sensation & Perception (PSYC 246 prereq)
 PSYC 347 Learning (PSYC 246 prereq)
- PSYC 418 Drugs & Addiction (PSYC 100 or PSYC 200 prereq & Junior status)

Choose two multidisciplinary electives (must be from different department codes)

- BIOL 130 Molecules to Cells (intended for BIOL majors)
- BIOL 250 Genetics (BIOL 130 and BIOL 140 prereqs)
- BIOL 358 Neuroanatomy (BIOL 351 prereq)
- BIOL 360 Comparative Physiology (BIOL 130 and BIOL 140 prereqs)
- BIOL 362 Human Physiology (BIOL 130 prereq)
- CSC 320 Principles of Artificial Intelligence (PH; C or better in CSC 202 and MATH 250)
- CSD 205 Anatomy, Physiology, & Science of Speech
- CSD 210 Anatomy, Physiology, & Science of Hearing (CSD 110 prereq)
- CSD 410 Neural Bases of Human Communication
- PHIL 301 Decision & Game Theory (PS & Q)
- PHIL 310 Philosophy of Mind (PH)
- PHIL 314 Philosophy of Language (PH)
- RELG 355 Medical Ethics (PH)

Additional Recommended Courses

Some or all of the following are recommended for students planning to pursue graduate training in neuroscience and may be required by some graduate programs: CHEM-131, -132, -321, -322, -441, -442; MATH-160; PHYS-151, -152, or PHYS-211, -212, -213. Students should also participate in supervised research (PSYC 382, -385). Please consult with your advisor.

Major Overview

MAJOR IN NEUROSCIENCE 36 credits, including PSYC-200, -240, -246, -349, -352 one Neuroscience elective (choose from PSYC-342, -343, -347, -418); two multi-disciplinary electives from different course codes (choose from BIOL-130, -250, -358, -360, -362, CSC-320, CSD-205, -210, -410, PHIL-301, -310, -314, RELG-355); and one Senior Inquiry from PSYC-452, -458, or -466. Students who complete Senior Inquiry in another major must substitute an additional 4-credit elective at the 300 or 400 level. The major requires a minimum of 20 credits at the 300-400 level.

Students may not major or minor in both Psychology and Neuroscience.

Recommended supporting courses: some or all of the following are recommended for students planning to pursue graduate training in neuroscience and may be required by some graduate programs: CHEM-131, -132, -321, -322, -441, -442; MATH-160; PHYS-151, -152, or PHYS-211, -212, -213. Please consult with your advisor.

For course descriptions, see the catalog pages for Biology, Chemistry, Communication Sciences & Disorders, Computer Sciences, Math, Philosophy, Physics, Psychology, and Religion.

*Fall, J term, Spring, Summer; see <u>Academic Calendar</u> for specific dates

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