NEUROSCIENCE SECOND MAJOR FOR ISP STUDENTS

Students must also complete the Undergraduate Registration Requirement (https://catalogs.northwestern.edu/undergraduate/requirements-policies/undergraduate-registration-requirement/) and the degree requirements of their home school.

NOTE: This Catalog describes Weinberg College BA requirements that pertain to students who matriculated at Northwestern after spring quarter 2023. Refer to the Archives (https://catalogs.northwestern.edu/archives/) if you are following BA requirements described in the 2018-2019 through 2022-2023 editions.

The Integrated Science Program is a highly selective BA program in Weinberg College. It is possible to complete a double major in ISP and Neuroscience with an Allied Field of Computation and Systems Modeling by completing the courses below in addition to ISP requirements. Note that NEUROSCI 311-0 in ISP is required to be completed by students doing the second major in neuroscience; students completing both majors may **not** substitute INTG_SCI 398-0 or another course for a neuroscience course in the ISP curriculum. ISP students should take NEUROSCI 311-0 in their sophomore or junior year.

Course	Title
Required course:	
NEUROSCI 206-0	Systems and Behavioral Neuroscience
2 Neuroscience Electives with a primary focus on human behavior and the human brain (Group A Elective), chosen from:	
COG_SCI 210-0	Language and the Brain
CSD 303-0	Brain and Cognition
or PSYCH 327-0	Brain and Cognition
CSD 310-0	Biological Foundations of Speech and Music
PSYCH 110-0	Introduction to Psychology
PSYCH 228-0	Cognitive Psychology
PSYCH 244-0	Developmental Psychology
PSYCH 248-0	Health Psychology
PSYCH 324-0	Perception
PSYCH 328-0	Brain Damage and the Mind
PSYCH 330-0	Special Topics in Cognition/Neuroscience [1]
PSYCH 336-0	Consciousness
PSYCH 378-0	Images of Cognition
PSYCH 391-0	Advanced Seminar in Cognition or Neuroscience [2]
PSYCH 392-0	Advanced Seminar in Psychology [3]
2 Neuroscience Electives with a primary focus on molecular, cellular, and systems-level mechanisms of brain function (Group B Elective), chosen from:	
NEUROSCI 303-0	Molecular Mechanisms of Neuropsychopharmacology
NEUROSCI 304-0	Developmental Neurobiology
NEUROSCI 308-0	Genetics of Human Behavior
NEUROSCI 320-0	Animal Behavior
NEUROSCI 324-0	Neurobiology of Biological Clocks and Sleep
NEUROSCI 325-0	Neurobiology of Stress, Adversity, and Resilience
NEUROSCI 326-0	Neurobiology of Learning and Memory
NEUROSCI 350-0	Advanced Neurophysiology Laboratory
NEUROSCI 355-0	Neurogenetics of Behavior Laboratory
NEUROSCI 357-0	Neuroanatomy Laboratory
NEUROSCI 360-0	Neuroscience of Brain Disorders
NEUROSCI 365-0	Neurobiology of Prediction
NEUROSCI 370-0	Genetic and Circuit Analysis of Motivated Behavior
NEUROSCI 377-0	Neurobiology of Sensation and Perception
NEUROSCI 390-0	Topics in Neuroscience
BIOL_SCI 303-0	Molecular Neurobiology
BIOL_SCI 307-0	Brain Structure, Function, and Evolution
ES_APPM 370-1	Introduction to Computational Neuroscience

1 PSYCH 330-0 when class topic is "Brain and Language."

2 PSYCH 391-0 when class topic is, "Left Brain, Right Brain," "Creative Problem Solving," or "Language and the Mind." For other topics, a syllabus may be provided to the DUS for consideration.

3 PSYCH 392-0 when class topic is "Psychoneuroimmunology," or "Emotional Brain." For other topics a syllabus may be provided to the DUS for consideration

Honors in Neuroscience

Majors with strong academic records and significant research accomplishments may pursue honors in neuroscience. Interested students should contact the director of undergraduate studies by email no later than the beginning of fall quarter senior year. Considerations for honors include GPA and the quality of a written thesis based on the student's research. Students also must complete at least 1 quarter of NEUROSCI 399-0 Independent Study in Neuroscience and NEUROSCI 398-0 Senior Thesis Seminar in winter of senior year. Students meeting department requirements may be recommended to the college for graduation with honors. For more information consult the department website (https://www.neurobiology.northwestern.edu/undergraduate/honors-in-the-major/) and see Honors in the Major (https://catalogs.northwestern.edu/undergraduate/arts-sciences/#academicoptionstext).