

COGNITIVE SCIENCE

cogsci.northwestern.edu

Cognitive science is the interdisciplinary scientific study of the mind and brain. It draws on methods and perspectives from cognitive psychology, computer science, linguistics, philosophy, anthropology, neuroscience, and other related fields to understand how the mind acquires, represents, and uses knowledge. The major in cognitive science gives a broad foundation in this interdisciplinary field, encompassing coursework across the allied disciplines of cognitive science. Required introductory courses survey basic phenomena and approaches; basic methodology courses impart the methods of cognitive science; theme courses provide foundations of disciplines within cognitive science; and elective courses allow students to pursue more advanced study in particular disciplines. A proseminar focuses on ongoing research in the field by Northwestern faculty.

For additional information about the Program please visit the Cognitive Science (<https://cogsci.northwestern.edu/>) website. Or contact the Program Assistant.

Programs of Study

- Cognitive Science Major (<https://catalogs.northwestern.edu/undergraduate/arts-sciences/cognitive-science/cognitive-science-major/>)
- Cognitive Science Minor (<https://catalogs.northwestern.edu/undergraduate/arts-sciences/cognitive-science/cognitive-science-minor/>)

COG_SCI 110-0 Introduction to Cognitive Science (1 Unit) Become familiar with and invested in cognitive science research, focusing on big themes in the study of the mind and mental representation, exemplified by interdisciplinary work conducted at Northwestern University. *Social Behavioral Sciences Distro Area Social and Behavioral Science Foundational Discipl*

COG_SCI 202-0 Evaluating Evidence (1 Unit) Introduction to evaluation of qualitative and quantitative evidence across science, politics, society, health, education, and industry. POLI_SCI 212-0 and COG_SCI 202-0 are taught together; may not receive credit for both courses. *Empirical and Deductive Reasoning Foundational Dis Formal Studies Distro Area Social Behavioral Sciences Distro Area*

COG_SCI 207-0 Introduction to Cognitive Modeling (1 Unit) Introduction to artificial intelligence and cognitive science. Fundamental questions concerning thinking, language understanding, analogy, commonsense reasoning, education, emotions and consciousness. *Formal Studies Distro Area Social Behavioral Sciences Distro Area Social and Behavioral Science Foundational Discipl*

COG_SCI 210-0 Language and the Brain (1 Unit) The study of language and its biological basis from linguistic, psychological, and neuroscientific perspectives. *Natural Sciences Distro Area Natural Sciences Foundational Discipline*

COG_SCI 211-0 Learning, Representation & Reasoning (1 Unit) Interdisciplinary study of the nature of the mind with emphasis on learning, representation, and reasoning. *Social Behavioral Sciences Distro Area Social and Behavioral Science Foundational Discipl*

COG_SCI 220-0 Selected Topics in Cognitive Science (1 Unit) Topics in cognitive science. Content varies. May be repeated for credit with change of topic.

COG_SCI 345-0 Presenting Ideas & Data (1 Unit) Understanding principles of cognitive psychology, data visualization, and graphic design to present ideas and data in an engaging, clear, and memorable manner. PSYCH 345-0 and COG_SCI 345-0 are taught together; may not receive credit for both courses. *Advanced Expression Social Behavioral Sciences Distro Area Social and Behavioral Science Foundational Discipl*

COG_SCI 366-0 Cognitive Science Proseminar (1 Unit) Seminar focused on current trends in cognitive science research and discussions with Northwestern cognitive science faculty. For cognitive science majors/minors or with consent of instructor.

COG_SCI 398-1 Senior Thesis Seminar (1 Unit) Independent research for a senior thesis under the direction of department faculty. By invitation only.

COG_SCI 398-2 Senior Thesis Seminar (1 Unit) Independent research for a senior thesis under the direction of department faculty. By invitation only.

COG_SCI 399-0 Independent Study (1 Unit) Faculty-directed research. Consent of instructor required.