

# COGNITIVE SCIENCE

cogsci.northwestern.edu

Cognitive science is the scientific study of the mind with the goal of understanding the nature of thought. Students learn the ways in which converging sources of evidence may be integrated to discover the mechanisms underlying the complex adaptive properties of human cognition. The major in cognitive science gives a broad foundation in this interdisciplinary field, encompassing cognitive psychology, linguistics, artificial intelligence, neuroscience, and related disciplines. 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 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*

**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.