



DEPARTMENT OF COGNITIVE SCIENCE

CAREER POSSIBILITIES

The cross-disciplinary preparation of cognitive science gives students a good grounding for a variety of possible careers. A BA in cognitive science will allow you to apply for jobs in any of the fields that are part of cognitive science. For example, you can apply for jobs in both psychology and computer science.

A BA in cognitive science will also allow you to apply to a variety of different graduate and professional programs. For example, you might decide your interest within cognitive science is language, and go on to do a Masters in Speech and Language Pathology. A BA in cognitive science is also suitable for pre-medicine, pre-law, and pre-management students.

Employers will be pleased to see that your training is broader than that of other candidates. A degree in cognitive science says something about you: "I have multiple interests and skills and can think about problems in a variety of ways. I've been exposed to a lot of different things, and have a substantial knowledge base." Our majors go on to jobs in the computer science industry, research, marketing, education, and many other fields.

To learn more about the employment value of a degree in Cognitive Science, visit <http://www.case.edu/artsci/cogs/careerpossibilities.html>

ELECTIVE COURSES

Cognitive Science is offering several elective courses for the 2012-2013 academic year, including:

COGS/RLGN 272. Morality and Mind

COGS 327: Gesture in Cognition and Communication

COGS 366: Functional Magnetic Resonance Imaging (fMRI)

COGS 329. Performance and Embodied Mind.

COGS 316/416: Decision-Making.

To learn more about Cognitive Science course offerings, visit <http://case.edu/artsci/cogs/courses.html>

RESEARCH OPPORTUNITIES

Get involved in research! There are lots of opportunities for undergraduates to do hands-on research with Cognitive Science faculty. For example:

The Gesture and Cognition Lab: Study the relationship between gesture, communication, and thought. The Brain, Mind, and Consciousness Lab: Study self-knowledge, visual awareness, social cognition, and their biological basis using fMRI. Laboratory for Applied Research in Cognitive Semiotics. Work on the cognitive study of meaning! The Conceptual Blending Lab: Study the dynamics of cognitive creativity. Learn more about our faculty and their research at <http://www.case.edu/artsci/cogs/faculty.html>.

COGNITIVE SCIENCE STUDENT ORGANIZATION

Cognitive science students have an active organization: <http://www.case.edu/artsci/cogs/csso.html>

Would you like to be added to our mailing list for students interested in cognitive science? Send your email address and request for inclusion to Jesse McGuinness at jessica.mcguinness@case.edu.

COGNITIVE SCIENCE DEPARTMENT OPEN HOUSE

Learn more about cognitive science at CWRU at our Department Open House!

12 October 2012, 12:30-2pm. Cognitive Science Lounge (Crawford Hall, 6th Floor).

FOOD! BEVERAGES! INFORMATION!



DEPARTMENT OF COGNITIVE SCIENCE

B.A. in Cognitive Science

Cognitive science brings the insights and methods of natural science, social science, and some of the humanities to the study of the mind. Cognitive science programs have emerged in recent years in response to a call for an integrated approach that does not restrict the study of the mind to a single discipline. Most programs are interdisciplinary and centered on psychology, neuroscience, linguistics, and/or computing. Our department's work is grounded in the fundamental cognitive sciences of neurobiology, neuroscience, psychology, biology, and anthropology, but is unique in its special focus on human creativity and invention, particularly art and technology—the systems invented by human beings to guide their thought and action both individually and culturally.

The undergraduate major requires a minimum of 30 semester hours in cognitive science and approved related coursework: 15 credit hours in the foundation component and 15 hours of elective coursework. Please see our website for information about the minor in cognitive science.

THE FOUNDATION COMPONENT

All majors must successfully complete the following core courses:

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| COGS 101 | Introduction to Cognitive Science I |
| COGS 102 | Introduction to Cognitive Neuroscience |
| COGS 201 | Human Cognition in Evolution and Development |
| COGS 202 | Human Cognition from a Cultural Perspective |
| PSCL 282 | Quantitative Methods in Psychology or equivalent, particularly ANTH 319 or STAT 201 |

ELECTIVES

All majors must successfully complete five elective courses. Examples of acceptable electives are listed below. Many other courses can qualify, subject to departmental approval. At least three of these courses must be at the 200 or 300 level. Some of these courses have additional prerequisites that may not count towards the requirements of the major. While students may enroll in up to 6 credits of independent study in Cognitive Science (COGS 397), only 3 of these credits may count toward the elective component of the major.

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| ANTH 102 | Being Human |
| ANTH 103 | Introduction to Human Evolution |
| ANTH 220 | Language, Culture, and Communication |
| ANTH 367 | Topics in Evolutionary Biology |
| ANTH 371 | Culture, Behavior, and Person |
| BIOL 225 | Evolution |
| BIOL 302 | Human Learning and the Brain |
| COGS 206 | Introduction to Cognitive Linguistics |
| COGS 301 | Topics in Cognitive Science |
| COGS 304 | Conceptual Integration |
| COGS 315 | Mental Space Theory |
| COGS 327 | Gesture in Communication and Cognition |
| COGS 328 | Cognition and Visual Aesthetic Experience |
| COGS 329 | Cognitive Approaches to Theatre and Dance |
| COSI 228 | Introduction to Mass Communication |
| COSI 313 | Language Development |
| ENGL 301 | Linguistic Analysis |
| ENGL 379 | Topics in Language Studies |
| PHIL 203 | Natural Philosophy |

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| PHIL 306 | Mathematical Logic and Model Theory |
| PHIL 365 | Philosophy of Mind |
| PSCL 352 | Physiological Psychology |
| PSCL 353 | Psychology of Learning |
| PSCL 355 | Sensation and Perception |
| PSCL 357 | Cognitive Psychology |
| PSCL 370 | Human Intelligence |

CORE COURSES

COGS 101 Introduction to Cognitive Science, 3 credits - Fall
A survey of major theories and facts about human cognition, along with an introduction to the kinds of methodologies available to modern cognitive science.

COGS 102 Introduction to Cognitive Neuroscience, 3 credits - Spring
A survey of the fundamental methods, findings, and theories that attempt to understand the human mind from a neuroscientific standpoint, covering the brain processes underlying such psychological phenomena as consciousness, thought, language, and voluntary action. The approach of this course is cross-disciplinary, including theories and data from clinical and experimental neuropsychology, brain imaging, neuro-electric and neuro-magnetic brain activity, and behavioral neuroscience, among others.

COGS 201 Human Cognition in Evolution and Development, 3 credits - Fall.
A survey of the unfolding of cognition over time, both the extended time of evolution (across many generations) and the much shorter time of personal development (measured within a single lifetimes). The approach of the course is cross-disciplinary, including approaches that come from complexity theory, biology, anthropology, philosophy, computing science, primatology, and comparative linguistics, among others.

COGS 202 Human Cognition from a Cultural Perspective, 3 credits - Spring
A survey of the fundamental methods, findings, and theories that attempt to understand the growth and evolution of cognition from a social science or humanistic standpoint. Theories of human cultural evolution and change, of the relationship between the cognizing individual and larger social-cognitive structures, and of such phenomena as distributed networks, cooperative mental work, and the phenomenology of human experience.

Cognitive Science is a department of the Case Western Reserve University College of Arts and Sciences.