Interdisciplinary Program Cognitive Science (ICOS)

ICOS 2201 Intro to Cognitive Science 3 Credits
Cognitive Science is the study of the mind, i.e., of how knowledge is acquired and used. Cognitive scientists use theories and methods drawn from many disciplines including cognitive psychology, neuroscience, philosophy of mind, linguistics, computer science, artificial intelligence, physics, mathematics, biology, and anthropology. They ask questions such as: How do people acquire language? What are the neural bases of perceiving, learning and remembering? What is the nature of knowledge? Can machines think? How do experts differ from novices? Are there innate ideas? How did human intelligence evolve? This course introduces students to the conceptual frameworks and methods used in the various disciplines which constitute Cognitive Science. The course is team-taught by professors from several Main Campus and Medical Center departments. The format is lecture/discussion. This course is required for cognitive science Minors, but open to all students. No prerequisites. Fall.
Level: Undergraduate
Grading: Main Campus (UGrad, Grad)

ICOS 2210 Neurotech and Human Futures 1.5-3 Credits
Level: Undergraduate
Grading: Main Campus (UGrad, Grad)

ICOS 2211 Addressing Guiding Neurotech 1.5 Credits
Level: Undergraduate
Grading: Main Campus (UGrad, Grad)

ICOS 2950 Res Modules:Cognitive Science 3 Credits
This course introduces students to research strategies of the different disciplines of Cognitive Science, using faculty research programs at Georgetown as examples. Approximately 6-8 Main Campus and Medical Center faculty offer research modules, of which students select three. In each module, students learn about and become engaged in the current research of the faculty member. A short paper or small project is normally required to complete each module. Meeting times are determined by each module instructor. More details on the modules and instructions for enrolling can be found on the Cognitive Sciences home page: http://cognitivescience.georgetown.edu/ This course is required for Cognitive Science Minors, but open to all students. Prerequisite: ICOS-201. Permission of instructor required. Spring.
Level: Undergraduate
Grading: Main Campus (UGrad, Grad)

ICOS 3325 Brain Diseases,Rsrch,Treatment 3 Credits
This course uses an interdisciplinary approach to study brain function through dysfunction. It covers basic concepts in neuroscience, ranging from cellular and molecular underpinnings to structural and functional differences observed in various brain-based diseases and disorders. These concepts build to an understanding of pathology as well as points of intervention. Special emphasis is placed on (1) bridging basic neural mechanisms (neurotransmitters, circuits, systems) and higher brain processes (emotion, cognition, memory) and (2) understanding the methods of research and assessment crucial to studying brain dysfunction and disorder. The course will involve lectures, student presentations, and discussion of primary literature. Specific disorders and topics vary semester to semester, but course modules focus on core neuroscience principles and concepts, behavioral and psychiatric disorders (drug abuse, schizophrenia, obesity), and neural injury and neurodegenerative disorders (traumatic brain injury, Alzheimer's, Parkinson's). Prerequisites: introductory biology, a neuroscience course, or permission of the instructor.
Level: Undergraduate
Grading: Main Campus (UGrad, Grad)

ICOS 4941 Tutorial: Cognitive Science 3 Credits
This is an independent research course, offered for a variable number of credits. Interested students should identify a Cognitive Science faculty member who agrees to supervise the student's research, and written permission must be obtained from that faculty member in order to enroll. For a list of faculty visit the Cognitive Science website: http://cognitivescience.georgetown.edu/ Cognitive Science Minors who are planning a senior thesis may undertake preparatory work for the thesis during their junior year via this course.
Level: Undergraduate
Grading: Main Campus (UGrad, Grad)

ICOS 4949 Tutorial: Cognitive Science 1-3 Credits
This is an independent research course, offered for a variable number of credits. Interested students should identify a Cognitive Science faculty member who agrees to supervise the student's research, and written permission must be obtained from that faculty member in order to enroll. Cognitive Science Minors who are planning a senior thesis may undertake preparatory work for the thesis during their junior year via this course.
Level: Undergraduate
Grading: Main Campus (UGrad, Grad)

ICOS 4970 Senior Thesis:Cognitive Scienc 0-3 Credits
Students who are undertaking a senior thesis in Cognitive Science must enroll for this course for a minimum of four credits distributed across the two semesters of their senior year. The number of credits, and their distribution across semesters, must be approved by the thesis mentor. The mentor's written permission is required to enroll for this course. More details on the senior thesis option may be found on the Cognitive Science home page: http://cognitivescience.georgetown.edu/
Level: Graduate, Undergraduate
Grading: Main Campus (UGrad, Grad)

ICOS 4971 Senior Thesis:Cognitive Scienc 1-4 Credits
Students who are undertaking a senior thesis in Cognitive Science must enroll for this course for a minimum of four credits distributed across the two semesters of their senior year. The number of credits, and their distribution across semesters, must be approved by the thesis mentor. The mentor's written permission is required to enroll for this course. More details on the senior thesis option may be found on the Cognitive Science home page: http://cognitivescience.georgetown.edu/
Level: Graduate, Undergraduate
Grading: Main Campus (UGrad, Grad)

ICOS 7710 Cognitive Science Core Course 3 Credits
ICOS 710: Cognitive Science Core Course. A seminar in which important topics in cognitive science are taught by participating Georgetown faculty from the main and medical campuses. Required for the Cognitive Science concentration, available for Ph.D. students in other programs with instructor permission. (Can be taken more than once for credit.)
Level: Graduate
Grading: Main Campus (UGrad, Grad)
Course registration restrictions:
Enrollment is limited to Graduate level students.

ICOS 7712 Cognitive Science seminar 3 Credits
A seminar in which graduate students and faculty interested in the cognitive sciences will read and discuss prominent articles across our fields. Can be repeated for credit.
Level: Graduate, Undergraduate
Grading: Main Campus (UGrad, Grad)
Course registration restrictions:
Enrollment is limited to students with a program in Computer Science, Computer Science, Computer Science, Computer Science, Linguistics, Linguistics, Linguistics, Linguistics, Neuroscience, Neuroscience, Neuroscience, Neuroscience, Philosophy, Philosophy, Philosophy, Philosophy, Psychology, Psychology, Psychology or Psychology.

Enrollment is limited to Graduate level students.

ICOS 7949 Tutorial: Cognitive Science 3 Credits
Level: Graduate
Grading: Main Campus (UGrad, Grad)
Course registration restrictions:
Enrollment is limited to students with a program in Linguistics, Linguistics, Linguistics, Linguistics, Neuroscience, Neuroscience, Neuroscience, Neuroscience, Philosophy, Philosophy, Philosophy or Philosophy.

Enrollment is limited to Graduate level students.

Enrollment limited to students in a Doctor of Philosophy degree.