

# Cognitive Science (CGSC)

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## Cognitive Science (CGSC) Courses

### **CGSC 5001 [0.5 credit]**

#### **Cognition and Artificial Cognitive Systems**

An introduction to the contribution of artificial intelligence and computer modeling of cognitive processes to cognitive science.

### **CGSC 5002 [0.5 credit]**

#### **Experimental Research in Cognition**

An introduction to the contribution of experimental psychology and neuroscience to cognitive science.

### **CGSC 5003 [0.5 credit]**

#### **Cognition and Language**

An introduction to the contribution of theoretical linguistics and linguistic research to cognitive science.

### **CGSC 5004 [0.5 credit]**

#### **Cognition and Conceptual Issues**

An introduction to the contribution of philosophy of mind, philosophy of language, and other conceptual investigations to cognitive science.

### **CGSC 5005 [0.5 credit]**

#### **Cognition and Neuroscience**

An introduction to the contribution of neuroscience to cognitive science.

### **CGSC 5100 [0.5 credit]**

#### **Issues in Cognitive Science**

A survey of the central problems and issues of cognitive research to start the process of acquiring the interdisciplinary breadth required to understand research in cognitive science.

### **CGSC 5101 [0.5 credit]**

#### **Experimental Methods and Statistics**

An introduction to the design of experiments and the statistics needed to interpret data in cognitive science. Also listed as HCIN 5400.

### **CGSC 5102 [0.5 credit]**

#### **Computational Methods**

An introduction to the basic computational skills necessary for cognitive science research.

### **CGSC 5303 [0.5 credit]**

#### **Linguistic Analysis, Culture and Cognition**

Universals of language from a cross-cultural perspective. Study of lesser-known languages leading to critical understanding of universal human concepts and communication practices in culture-specific configurations. Cross-linguistic analysis as a means to general understanding of diversity and universality in human cognition.

### **CGSC 5901 [0.5 credit]**

#### **Special Topics in Cognitive Science**

Seminar on current, important issues related to Cognition and Neuroscience, Philosophy, Computer Science, Linguistics and/or Psychology. Topics will vary from year to year.

### **CGSC 5907 [0.5 credit]**

#### **Independent Research**

Permission to register and approval of research plan must be obtained from the graduate supervisor. A final research report must be filed in the departmental office prior to submission of course grade. The course may be repeated for credit.

### **CGSC 5908 [1.0 credit]**

#### **Research Project**

Students may enroll in multiple sections of this course (as necessary) to complete their Research credits.

### **CGSC 5909 [2.5 credits]**

#### **M. Cog. Thesis**

### **CGSC 6001 [0.5 credit]**

#### **Theory and Methods of Cognitive Science**

Introduction to the main epistemological issues in cognitive science and to the diverse methods that researchers use to study cognition.

### **CGSC 6002 [0.5 credit]**

#### **Methodology Rotation I**

Students spend one term in a laboratory or other research venue using a method for studying cognition (behavioural, linguistic-theoretic, computational, conceptual, neuroscientific). Assignments will be as specified by each rotation supervisor.

### **CGSC 6003 [0.5 credit]**

#### **Methodology Rotation II**

Students spend one term in a laboratory or other research venue using a different method for studying cognition (behavioural, linguistic-theoretic, computational, conceptual, neuroscientific). Assignments will be as specified by each rotation supervisor.

### **CGSC 6004 [0.5 credit]**

#### **Cognitive Modelling for Cognitive Science**

Introduction to the field of cognitive modelling. Different modelling systems and how to evaluate them against human data; how to create cognitive models using the ACT-R cognitive architecture. Lectures three hours per week.

### **CGSC 6501 [1.0 credit]**

#### **Special Topics in Cognitive Science**

Seminar course on a topic of interest to students in Cognitive Science. Topics will vary from year to year. Lectures three hours per week.

**CGSC 6801 [0.5 credit]****Proseminar in Cognitive Science**

A survey of the central problems and issues of natural and artificial cognition and a brief examination of contemporary neuroscience. Compulsory in the first year of registration. Precludes additional credit in CGSC 6801 [1.0] credit no longer offered.

**CGSC 6901 [0.5 credit]****Directed Studies in Cognitive Science I****CGSC 6902 [0.5 credit]****Directed Studies in Cognitive Science II****CGSC 6909 [9.0 credits]****Ph.D. Thesis**

**Summer session:** some of the courses listed in this Calendar are offered during the summer. Hours and scheduling for summer session courses will differ significantly from those reported in the fall/winter Calendar. To determine the scheduling and hours for summer session classes, consult the class schedule at [central.carleton.ca](http://central.carleton.ca)

Not all courses listed are offered in a given year. For an up-to-date statement of course offerings for the current session and to determine the term of offering, consult the class schedule at [central.carleton.ca](http://central.carleton.ca)