Cognitive Science (CGSC) Courses

CGSC 1001 [0.5 credit]
Mysteries of the Mind
Challenges faced in understanding the mind, and some of the approaches cognitive science has brought to bear on them. Topics may include the nature of knowledge, how we learn, the extent to which human thinking is rational, biases in thinking, and evolutionary influences on cognition.
Lectures three hours per week.

CGSC 1005 [0.5 credit]
Computational Methods in Cognitive Science
Introduction to computational methods, with an emphasis on programming. Topics and assignments will focus on applications in cognitive science. No prior computing experience required.
Prerequisites: CGSC 1005 and PSYC 1001.
Lecture three hours and tutorial one and a half hours a week.

CGSC 2001 [0.5 credit]
Introduction to Cognitive Science
An integrated background of the discipline of Cognitive Science, with an historical overview (1940's onward) and examination of the extent to which the discipline has assimilated the collective knowledge of contributing disciplines (e.g., psychology, philosophy, linguistics, artificial intelligence and neuroscience).
Prerequisite(s): second-year standing or permission of the Institute.
Lectures three hours a week.

CGSC 2002 [0.5 credit]
Theories and Methods in Cognitive Science
Selected topics in cognitive science covered from the perspectives of psychology, computer science, linguistics, philosophy, and other related disciplines. Students may be required to complete independent research projects.
Prerequisite(s): CGSC 2001, second year standing, and two of PSYC 1001, LING 1001, COMP 1005, PHIL 1301 or PHIL 2501, or permission of the Institute. Restricted to students enrolled in B.Cog.Sc. General or Honours.
Seminars and tutorials six hours per week.

CGSC 3004 [0.5 credit]
Philosophy and Cognitive Science
An examination of the significance and role of philosophy in cognitive science. Topics may include: philosophical methods for studying the mind, prospects for naturalizing consciousness and intentionality, assessing competing models of the mind.
Prerequisite(s): third-year standing and 0.5 credit in CGSC 2001 and PHIL 2501.
Seminar three hours per week.

CGSC 3201 [0.5 credit]
Empirical Issues in Cognitive Science
Issues in empirical Cognitive Science are examined through a detailed consideration of selected topics.
Prerequisite(s): third-year standing, and 0.5 credit in CGSC 2001 or PSYC 2700.
Seminars three hours per week.

CGSC 3301 [0.5 credit]
Language and Cognitive Science
Issues related to language and cognitive science are examined through a detailed consideration of selected topics.
Prerequisite(s): third-year standing, and CGSC 2001.
Seminars three hours per week.

CGSC 3501 [0.5 credit]
Cognitive Neuroscience
Issues related to the role of cognitive neuroscience research in cognitive science are examined through a detailed consideration of selected topics.
Prerequisite(s): third-year standing and CGSC 2001.
Seminar, three hours per week.

CGSC 3908 [0.5 credit]
Honours Seminar in Cognitive Science
Major theories and empirical approaches within Cognitive Science are examined through a detailed consideration of selected topics. Students are required to complete independent research projects to prepare for their fourth-year honours theses.
Prerequisite(s): CGSC 3001 (no longer offered) and CGSC 3002 (no longer offered).
Seminars and tutorials six hours per week.

CGSC 3999 [0.0 credit]
Co-operative Work Term

CGSC 4001 [0.5 credit]
Artificial Intelligence for Cognitive Scientists
An introduction to the contribution of artificial intelligence and computer modeling of cognitive processes to cognitive science.
Prerequisite(s): third-year standing and CGSC 2002 and (CGSC 1005 or COMP 1005). Restricted to students enrolled in B.Cog.Sc. Honours.
Seminars and labs six hours per week.
CGSC 4601 [0.5 credit]
Cognitive Modelling in 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.
Prerequisite(s): third year standing, CGSC 2001, and
(CGSC 1005 or COMP 1005).
Also offered at the graduate level, with different
requirements, as CGSC 5106, for which additional credit is
precluded.
Seminar three hours per week, tutorial one and a half
hours per week.

CGSC 4801 [0.5 credit]
Independent Study
A reading or research course for selected students
who wish to investigate a particular topic of interest.
Normally students may not offer more than one
credit of independent study in their total program
(including independent study credits taken through other
departments).
Prerequisite(s): third- or fourth-year standing and
permission of the Institute.

CGSC 4802 [0.5 credit]
Independent Study
A reading or research course for selected students
who wish to investigate a particular topic of interest.
Normally students may not offer more than one
credit of independent study in their total program
(including independent study credits taken through other
departments).
Prerequisite(s): third- or fourth-year standing and
permission of the Institute.

CGSC 4900 [0.5 credit]
Special Topics in Cognitive Science
The topic of this course will vary from year to year.
Students may register in more than one section of
CGSC 4900 but may register in each section only once.
Prerequisite(s): each section will have its own
prerequisites and permission of the department if is
required.
Seminar three hours per week.

CGSC 4908 [1.0 credit]
Honours Thesis
Interdisciplinary thesis. In developing a thesis, students
must consult the Undergraduate Supervisor. Only the
Undergraduate Supervisor can assign a supervisor
or grant approval to register in this course. Faculty
regulations governing Honours Research Essays and
Honours Theses apply.
Precludes additional credit for CGSC 4909.
Prerequisite(s): fourth year standing, CGSC 3908, and
enrolment in B.Cog.Sc. Honours with a major CGPA of
8.0.

CGSC 4909 [1.0 credit]
Honours Project
Interdisciplinary project. Students engage in one or more
group research projects.
Precludes additional credit for CGSC 4908.
Prerequisite(s): 4th year standing, enrolment in B. Cog.
Sc. Honours.
Seminar

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

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