

CGSC 2001B: Introduction to Cognitive Science
Course Outline
Fall 2019

Class Information

Dates: Mondays and Wednesdays

Time: 10:05 am – 11:25 pm

Location: Southam Hall 518

Course prerequisites: second-year standing and FYSM 1607 or CGCS 1001, or permission of the Institute.

Instructor Information

Instructor: Josh Redstone

Office: 2220 Dunton Tower

E-mail: josh.redstone@carleton.ca

Office Hours: Monday & Wednesday, 12:00 pm – 1:00 pm (or by appointment).

Teaching Assistant:

Name: TBA

E-mail: TBA

Office hours: TBA

Course Description

This course is an introduction to cognitive science, the inter-disciplinary study of the mind. Although this course is a required credit for cognitive science majors, it is also intended to be accessible to students from areas outside of cognitive science and its contributing disciplines.

We will begin with a brief overview of the pre-history of cognitive science. As we proceed, we will learn about each of the core disciplines of cognitive science (i.e. artificial intelligence, psychology, neuroscience, linguistics, anthropology and philosophy). We will also learn about the research tools used in each of these contributing disciplines. We'll learn about the fundamental concepts and theoretical foundations (e.g. information processing, representation, etc.) upon which cognitive science was established, we'll survey a number of information processing models of the mind (e.g. symbolic vs. connectionist, etc.), encounter some of the theoretical and conceptual challenges faced by cognitive scientists, and explore some classic experimental results that have helped to shape cognitive science into the discipline it is today. We shall end the course by examining some of the unanswered questions about minds that cognitive scientists will attempt to solve in the years ahead.

Required Text

Bermudez, Jose Luis. (2014). *Cognitive Science: An Introduction to the Science of Mind, 2nd Ed.* New York: Cambridge University Press.

Supplementary readings may be made available on cuLearn as the course progresses.

Course Website

The course website can be found on cuLearn (<https://carleton.ca/culearn/>). Here you will find this course outline, our class schedule, PowerPoint slides from lectures, and other supplementary materials that will be made available as we proceed through this course. You will also find the discussion forums, which are a great way for you to ask questions about the course material, share and discuss your own ideas, organize study groups for your tests, and so forth.

While the materials on cuLearn are helpful, they are no substitute for attending lectures. Please note that we may occasionally hold group discussions, debates, or question/answer sessions during lecture. These will not be reproduced and posted on cuLearn. Therefore, I highly recommend that you attend lectures regularly.

Evaluation

Item	Weight of Grade	Date
Test 1	30%	October 16
Test 2	30%	November 20
Final Exam	40%	TBA
TOTAL	100%	---

Lecture Schedule: Note, this schedule may be subject to minor adjustments.

Date	Lecture Topic	Readings
Week 1 Sep. 4 th	Introduction and Historical Overview	None.
Week 2 Sep. 9 th , Sep. 11 th	Early Experimental Results, Three Milestones in Cognitive Science	Ch. 1, Ch. 2
Week 3 Sep. 16 th , Sep. 18 th	The Turn to the Brain	Ch. 3
Week 4 Sep. 23 th , Sep. 25 th	Integration Challenge	Ch. 4
Week 5 Sep. 30 nd , Oct. 2 nd	Integration Challenge cont.	Ch. 5
Week 6 Oct. 7 th , Oct. 9 th	Physical Symbol Systems	Ch. 6
Week 7 Oct. 16 th	Test 1 (Chapters 1-5)	None.
Reading Week	No Class	
Week 8 Oct. 28 th , Oct 30 th	Applying the Symbolic Paradigm	Ch. 7
Week 9 Nov. 4 th , Nov. 6 th	Neural Networks	Ch. 8
Week 10 Nov. 11 th , Nov. 13 th	Neural Network Models of Cognitive Processes	Ch. 9
Week 11 Nov. 18 th , Nov. 20 th	How are Cognitive Systems Organized?, Test 2 (Chapters 6-9)	Ch. 10
Week 12 Nov. 25 th , Nov. 27 th	Cognitive Systems cont., A Case Study: Mindreading	Ch. 10, Ch. 12
Week 13 Dec. 2 nd , Dec. 4 th , Dec. 6 th	Special Topics, End-of-Term Review	TBA

Tests and Examinations

In this course you will complete two non-cumulative term tests (dates for each are given above). Each of these tests is worth 30% of your final grade, for a total of 60%. They will consist of multiple-choice questions and short-answer essay questions. Anything covered in our lectures may appear on these tests, so I encourage everyone to attend lectures regularly.

The final exam will consist of multiple-choice questions, short-answer questions and long-answer questions. It will be like the term tests, and it will cover material from the entire course. The final exam shall be worth 40% of your final grade. The final exam will be held during the exam period (date to be determined).

Test Deferral Policy

Students who miss a test may ask me to schedule a deferred test only under two conditions: illness or bereavement. Should you miss a test for these reasons, you must contact me by email within 24 hours of missing the test to request a deferral and arrange to provide me with the appropriate documentation (e.g. doctor's note, etc.). Make-up tests must be written within 7 days of the original test date. To write a deferred test, you must receive written permission from me after you have provided the necessary documentation.

Electronic Devices in the Classroom

Students may use electronic devices in the classroom such as laptops, tablets, and smartphones, provided that they are used to take notes, view lecture materials, and so forth. Otherwise, these devices are to be left on silent and put away so as not to distract the students around you.

Plagiarism

The University Senate defines plagiarism as "presenting, whether intentional or not, the ideas, expression of ideas or work of others as one's own." This can include:

- reproducing or paraphrasing portions of someone else's published or unpublished material, regardless of the source, and presenting these as one's own without proper citation or reference to the original source;
- submitting a take-home examination, essay, laboratory report or other assignment written, in whole or in part, by someone else;
- using ideas or direct, verbatim quotations, or paraphrased material, concepts, or ideas without appropriate acknowledgment in any academic assignment;
- using another's data or research findings;
- failing to acknowledge sources through the use of proper citations when using another's works and/or failing to use quotation marks;
- handing in "substantially the same piece of work for academic credit more than once without prior written permission of the course instructor in which the submission occurs."

Plagiarism is a serious offence, which cannot be resolved directly with the course's instructor (me). The Associate Deans of the Faculty conduct a rigorous investigation, including an interview with the student, when an instructor suspects a piece of work has been plagiarized. Penalties are not trivial. They range from a mark of zero for the plagiarized work to a final grade of "F" for the course, and even suspension from all studies or expulsion from the University.

Grading System

Letter grades assigned in this course will have the following percentage equivalents:

A+ = 90-100	B = 73-76	C - = 60-62
A = 85-89	B - = 70-72	D+ = 57-59
A - = 80-84	C+ = 67-69	D = 53-56
B+ = 77-79	C = 63-66	D - = 50-52

F Failure. No academic credit

ABS Absent from the final examination

DEF Official deferral (see "Petitions to Defer")

FND "Failed, no Deferral" – assigned when the student is absent from the final exam and has failed the course on the basis of inadequate term work as specified in the course outline. Standing in a course is determined by the course instructor, subject to the approval of the Chair and Faculty Dean.

Requests for Academic Accommodation

You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

Pregnancy obligation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details see the Student Guide.

Religious obligation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details see the Student Guide.

Academic Accommodations for Students with Disabilities: The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodations for the formally-scheduled exam (if applicable).

Petitions to Defer

Students unable to complete a final term paper or write a final examination because of illness or other circumstances beyond their control or whose performance on an examination has been impaired by such circumstances may apply within five working days to the Registrar's Office for permission to extend a term paper deadline or to write a deferred examination. The request must be fully and specifically supported by a medical certificate or other relevant documentation. Only deferral petitions submitted to the Registrar's Office will be considered.

ICS Resources (613-520-2600, phone ext. 2522)

Department of Cognitive Science (2522) 2201 DT (Dunton Tower)

Registrar's Office (3500) 300 Tory

Student Academic and Career Development Services (7850) 302 Tory

Paul Menton Centre (6608) 501 University Centre

Writing Tutorial Service (1125) 4th fl Library

Learning Support Services (1125) 4th fl Library

Academic Advising

Visit the Cognitive Science Undergraduate Office, DT 2201 to discuss your program. Advisors can answer questions concerning:

- Course selection and meeting program requirements
- Your audit
- Gaining access to courses that are closed
- Information concerning prerequisites and preclusions
- Course equivalencies and substitutions
- Information about whether to pursue the (Honours Project Course) or the Thesis stream and CGPA requirements
- Community Practicum Course
- Concentrations
- Exchanges and course selection

Departmental Drop-Box Policy

The drop-box is located outside 2201 DT. Mail received prior to 8:30am will be date stamped with yesterday's date. Mail received before 8:30am on Monday's will be date stamped with the previous Friday's date. Please include your name, student number, course code and instructor's name. If any of this information is missing it may delay getting your paper to your instructor.

Fall 2019: Important Dates/Deadlines(See: <http://calendar.carleton.ca/academicyear/>)

September 1, 2019	Last day for receipt of applications from potential fall (November) graduates.
September 2, 2019	Statutory holiday. University closed.
September 3, 2019	Academic orientation (undergraduate and graduate students). Orientation for new Teaching Assistants. All students are expected to be on campus. Class and laboratory preparations, departmental introductions for students and other academic preparation activities will be held.
September 4, 2019	Fall term begins. Fall and fall/winter classes begin.
September 13-15, 2019	Full and late summer term deferred final examinations to be held.
September 17, 2019	Last day of registration for fall term and fall/winter courses. Last day to change courses or sections (including auditing) for fall term and fall/winter courses. Graduate students who have not electronically submitted their final thesis copy to the Faculty of Graduate and Postdoctoral Affairs will not be eligible to graduate in fall 2019 and must register for the fall 2019 term.
September 30, 2019	Last day to withdraw from fall term and fall/winter courses with a full fee adjustment. Withdrawals after this date will result in a permanent notation of WDN on the official transcript.
October 11, 2019	December examination schedule (fall term final and fall/winter mid-terms) available online.
October 14, 2019	Statutory holiday. University closed.
October 15, 2019	Last day for receipt of applications for admission to an undergraduate degree program for the winter term from applicants whose documents originate from outside Canada or the United States.
October 21-25, 2019	Fall break, no classes.
November 8, 2019	Last day to request Formal Examination Accommodation Forms for December examinations to the Paul Menton Centre for Students with Disabilities. Note that it may not be possible to fulfil accommodation requests received after the specified deadlines.
November 15, 2019	Last day for receipt of applications for admission to an undergraduate degree program for the winter term.
November 22, 2019	Last day for summative tests or examinations - or for formative and/or practical tests or examinations totalling more than 15% of the final grade - before the official examination period (see examinations regulations in the Academic Regulations of the University section of the Undergraduate Calendar/General Regulations of the Graduate Calendar).
December 1, 2019	Last day for receipt of applications from potential winter (February) graduates. Last day for graduate students to submit their supervisor-approved thesis in examinable form to the department.
December 6, 2019	Fall term ends. Last day of fall term classes. Classes follow a Monday schedule. Last day for take-home examinations to be assigned, with the exception of those conforming to the examinations regulations in the Academic Regulations of the University section of the Undergraduate Calendar/General Regulations of the Graduate Calendar. Last day for academic withdrawal from fall term courses. Last day for handing in term work and the last day that can be specified by a course instructor as a due date for term work for fall term courses. Last day for receipt of applications for undergraduate degree program transfers for winter term.
December 7-8, 2019	No classes or examinations take place.
December 9-21, 2019	Final examinations in fall term courses and mid-term examinations in fall/winter courses may be held. Examinations are normally held all seven days of the week.
December 21, 2019	All take-home examinations are due on this day, with the exception of those conforming to the examinations regulations in the Academic Regulations of the University section of the Undergraduate Calendar/General Regulations of the Graduate Calendar.
December 25-January 1, 2020 (inclusive)	University closed.