

CGSC 2001A – INTRODUCTION TO COGNITIVE SCIENCE
INSTITUTE OF COGNITIVE SCIENCE
CARLETON UNIVERSITY
Summer 2021
Blended Delivery (recorded lectures)

Dates: Mondays and Wednesdays May 10th – June 18th, 2021
Time: 2:35pm – 5:25pm
Location: N/A

Instructor: Jay Jennings
Office: N/A
E-mail: jayjennings@cmail.carleton.ca
Office Hours: Mondays, 1:30 PM to 2:30 PM or by appointment.

TA: N/A
Email: N/A
Office Hours: N/A

PASS coordinator: N/A
Office hours: N/A
Contact info: N/A

Course Description and Learning Objectives

This course is a broad introduction to the inter-disciplinary field of Cognitive Science. We will begin with a historical introduction, followed by an investigation into the concepts of information processing and representation. Later in the term we will discuss the manner in which Cognitive Science integrates various disciplines (psychology, linguistics, philosophy, neuroscience, etc), examine information processing models of the mind, and discuss new horizons in the field (e.g., embodiment, consciousness).

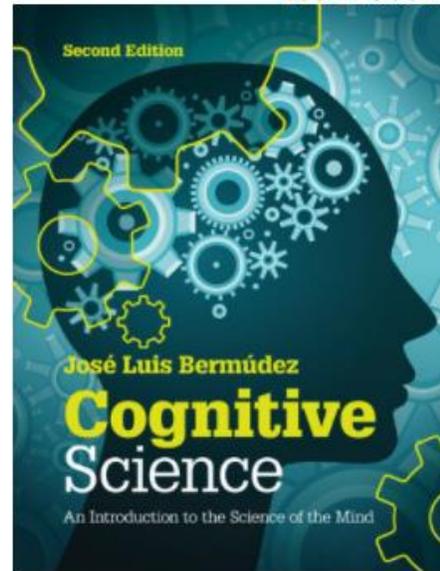
Although this course serves as a core introductory credit for all Cognitive Science majors, it is also intended to be accessible to students in other disciplines, whether or not those disciplines are connected to Cognitive Science.

By the end of this class, students will be able to:

- define terms related to cognitive science
- describe historical developments that have shaped the field of cognitive science
- describe cognitive science theories and research
- compare and contrast findings from broad areas of cognitive science to explain theories of cognition

Text book required

There is a kindle version on Amazon for 65 dollars (<https://www.amazon.ca/Cognitive-Science-Introduction-Mind->



[ebook/dp/B00IO0EBIK/ref=tmm_kin_swatch_0? encoding=UTF8&qid=1617809180&r=8-1\)](https://www.amazon.ca/dp/B00IO0EBIK/ref=tmm_kin_swatch_0?encoding=UTF8&qid=1617809180&r=8-1)

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

Other readings and course material will be provided.

Course Web Page (Carleton Brightspace)

The course website is located at brightspace.carleton.ca. On this site you will find the course outline, schedule, several discussion forums, short quizzes, updates, marking rubrics, and a variety of learning exercises and useful links. It is going to be a dynamic space with many opportunities for you to make a meaningful contribution to the course and connect with your peers. The discussion forums represent an excellent place in which to ask questions of your colleagues, share your thoughts on the material, post interesting and relevant links, arrange study groups in Gather.town (see below), etc

The site also includes the PowerPoint lecture slides and the video recordings of lectures (which can be accessed after lecture). While these slides are meant to assist your efforts in the course, they are only a starting point for what we talk about in class. Material will be covered in class that is not included on these slides. In other words, the slides should not be regarded as a substitute for class attendance.”

There is also a discussion/social place available to interact in a more human way during this distance education: <https://gather.town/app/XWsihjKd5JPAIJ32/CGSC%20Waterfront%20Social>

The password is: cognitivescience

Gather.town is a platform where you can move your avatar around a virtual space and when you encounter another person their screen and audio shows up, but if you leave (i.e., if you are out of earshot)

the screen and audio fades. This is meant as a poor simulation of chatting with other students after class, studying together, bumping into each other in the hall, etc.

Evaluation

Test 1: The first test will cover content from the first portion of the course prior to test 1. More details will be provided before the test.

Test 2: The second test will cover content starting with material after test 1 up to the content covered prior to test 2. More details will be provided before the test.

Final Exam: The final exam will be cumulative, and so will cover content from the entire course. More details will be provided closer to the exam date.

The tests and exam are based on (1) text book and supplementary readings, (2) course slides, which will be made available on cuLearn, (3) information presented during class, including class discussions. In particular, class attendance is strongly encouraged because information will be provided during class beyond that in the textbook or slides, including explanations of course themes, perspectives that are not in the textbook or in the slides, hints for tests, etc. Thus, if you miss a class, it is strongly recommended that you watch the recording.

If you wish to review your test, please contact the professor afterwards and they can schedule a meeting with you to review it and answer any questions.

Test Deferral Policy

If, for extraordinary reasons you must miss a test, you must notify the instructor as soon as possible **before** the date of the test (failure to do so will result in a grade of zero for the test). A deferred test will be permitted under only two conditions: illness or bereavement. Documentation is required in order to schedule a deferral, found on CuLearn. If no documentation is provided, you will receive a grade of zero for that test.

I've made the tests doable over 5 days (from the Thursday to the following Tuesday), so there should be ample time for you to find to do it.

Weighting of the Final Grade

Test 1:	20%	[Due Between Wednesday May 19 th and Wednesday May 26 th]
Test 2:	30%	[Due between Wednesday June 2nd and Monday June 7th]
Final Exam:	40%	[TBD]
Quizzes	10%	[after lecture until the end of the course; unlimited tries]

E-mail Protocol and Guidelines

I will respond to e-mails within 48 hours (excluding weekends and holidays). E-mail is best reserved for simple questions - if you have questions that require more than a yes/no type answer, the best forum for answering them is during class or office hours.

Communication guidelines: Please write e-mails clearly using complete words, sentences and punctuation. Address your emails appropriately by using the names and titles you have asked to use when addressing your TA and professor.

Lecture Schedule

Please note that dates for topics are approximate and may change. All chapter readings can be found in the Bermudez text. Any other readings will be made available on cuLearn.

Date	Lecture Topic	Readings
May 10 th	Welcome and introduction History/Cognitive Revolution	1
May 12 th	Turing/Early Milestones The Brain	2, 3
May 17 th	The Brain Continued! The Integration Challenge	4, 5
May 19 th	Information Processing Models Review for Test.	6
Test 1	Due Between Wednesday May 19th and Tuesday May 25th	
May 26 th	May 24 is Victoria Day Applying the Symbolic Paradigm Applications of the Symbolic Paradigm	7, 8
May 31 st	Physical Symbol Systems and Neural Nets Neural Nets and their Applications	9
June 2 nd	Neural Nets and Hybrid Architectures Test Review	10
Test 2	Due between Wednesday June 2nd and Monday June 7th	
June 7 th	Emotion and Cognition Embodied Cognition	11, 12
June 9 th	Embodied Cognition Continued! Consciousness	13, 14
June 14 th	Reflections and Modularity	15

	Rationality and Fast and Frugal Heuristics	
June 16 th	Intelligent Tutoring Systems and User Modelling TBD	
June 18 th	Exam/Course review	

In accordance with the Carleton University Undergraduate Calendar (p 34), the letter grades assigned in this course will have the following percentage equivalents:

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

Grades entered by Registrar:

WDN = Withdrawn from the course

DEF = Deferred

Academic Regulations, Accommodations, Etc.

University rules regarding registration, withdrawal, appealing marks, and most anything else you might need to know can be found on the university's website, here:

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 an accommodation from PMC, meet with me to ensure accommodations arrangements are made. Please consult the PMC website for the deadlines to request accommodations for the formally - scheduled exam (if applicable).

Plagiarism

The University Senate defines plagiarism as “presenting, whether intentionally 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 that cannot be resolved directly by the course’s instructor. The Associate Dean of the Faculty conducts 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 can include a final grade of "F" for the course.

Important Information

- Students must always retain a hard copy of all work that is submitted.
 - All final grades are subject to the Dean’s approval.
 - For us to respond to your emails, we need to see your full name, CU ID, and the email must be written from your valid CARLETON address. Therefore, in order to respond to your inquiries, please send all email from your Carleton Cmail account. If you do not have or have yet to activate this account, you may wish to do so by visiting <https://carleton.ca/its/get-started/new-students-2/>
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For a list of dates and deadlines, including holidays and exam dates, please visit:
<https://calendar.carleton.ca/academicyear/>