



Dr. Rebecca Merkley

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Office Hours: by appointment

THEORIES IN COGNITIVE SCIENCE

CGSC 2001B - Fall 2021

Class Information

Time: Fridays

11:35am-1:05pm (additional 1.5 hours asynchronous)

Course website:

brightspace.carleton.ca

Here you will find the outline, schedule, Zoom link, and other materials.

Course Description

Cognitive Science combines psychology, artificial intelligence, neuroscience, linguistics, and philosophy to study how people think. Students will learn about how cognitive scientists approach problems in a diverse, integrated manner to help us understand how people process information.

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

Prerequisites: second-year standing and FYSM1607 or CGSC1001.



“As humans, we can identify galaxies light years away and we can study particles smaller than an atom, but we still haven’t unlocked the mystery of the 3lbs of matter that sits between our ears.” – President Barack Obama

Readings

The readings for this course include a range of media, scientific articles, and book chapters. Readings will be assigned on a weekly basis and will be available via the Brightspace course webpage and the library. You do not need to buy anything.

Technical Requirements

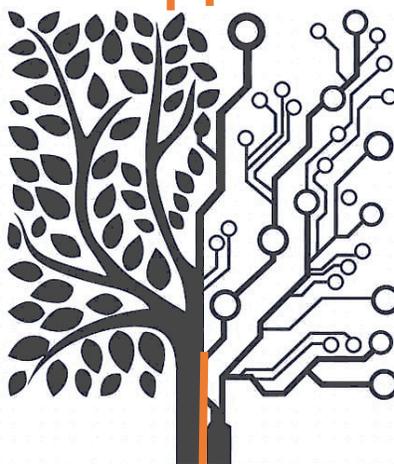
A list of technical requirements for online learning is available here:

<https://carleton.ca/its/help-centre/learning-in-an-online-environment/>

You can download Microsoft Office 365 free of charge:

<https://carleton.ca/its/ms-offer-students/>

Teaching Assistants:
TBD

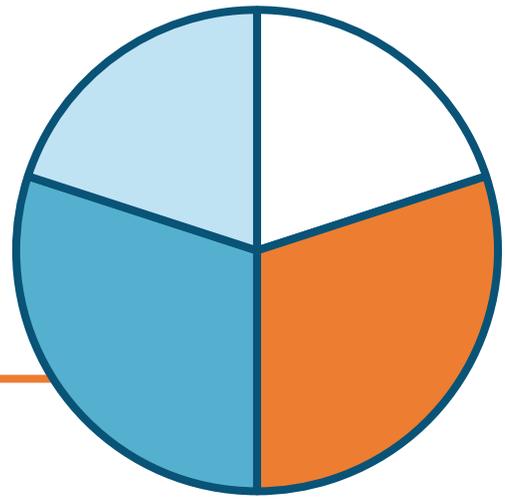


Learning Outcomes

- Identify the major disciplines that make up cognitive science and their unique contributions
- Apply concepts and methods from cog sci to everyday problems
- Develop critical thinking skills and make connections

Evaluation

Your grades will be based on two assignments, weekly quizzes and participation, and a midterm test. There is no final exam. Detailed descriptions of all activities and assignments are on cuLearn. Weekly deadlines are Fridays at 5pm.



- Weekly Participation
- Midterm Test
- Thought Paper
- Media Assignment

Weekly Participation (20%)

There are weekly quizzes or activities to complete for participation marks. These will be described on Brightspace and some activities will be done in groups. You are encouraged to attend the weekly synchronous meetings and participate in class discussions. These will be recorded if you cannot attend. You are expected to direct and reflect on your own learning.

Midterm Test (30%)

There will be a midterm test consisting of multiple choice, true/false, and short answer questions. The test will cover all readings, videos, and lectures up until October 22nd.

Friday, October 22nd

Thought Paper (30%)

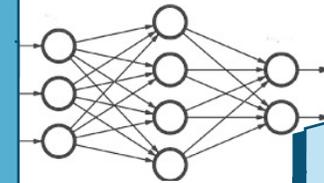
Write a thought paper (max 1500 words) on a cognitive science topic covered in class and discuss how the research in that area should (or should not) impact everyday problems. A rubric and detailed description are on Brightspace.

Due December 10

Media Assignment (20%)

The goal of this assignment is to help you see how cognitive science is described in the news and to become more critical consumers of information. You will need to find an article in the media and the primary source (scientific paper) covered in the article. A rubric and detailed description are on Brightspace.

Due October 8th



Course Expectations & Policies

This is a “blended” online course, which means that you are expected to participate in the Friday meetings (on Zoom). They will be recorded in case you cannot make it, but please note that breakout rooms will not be recorded. Your mental and physical health are the top priority. You can choose whether to turn your camera on and backgrounds are welcome. You are also asked to display your preferred name, or nickname, pronouns, and a photo for when your camera is off.

Civility and Privacy: The University is a place of open discussion and free inquiry. It is expected that you will be respectful and considerate of your classmates and our learning environment will be free from discrimination and harassment

Late Assignments: You may use a ‘no questions asked’ 3-day grace period for one assignment (not the test) and turn it in without penalty. If you need other extensions or accommodations, please contact the TA or instructor at least a week ahead of the deadline.



Course Schedule

Week	Date	Topic	Assignment
1	Sept 10	Introduction	
2	Sept 17	Historical Overview	
3	Sept 24	Brain & Mind	
4	Oct 1	Integration Challenge	
5	Oct 8	Information Processing	Media Assignment
6	Oct 15	Human and Machine Learning	
7	Oct 22	Review and Midterm	Midterm Test
FALL BREAK			
8	Nov 5	Comparative Cognition	
9	Nov 12	Social Cognition	
10	Nov 19	Metacognition & Decision Making	
11	Nov 26	Applications of Cognitive Science	
12	Dec 3	Neuroplasticity and Lifelong Learning	
13	Dec 10	No Class Meeting	Final Paper

This schedule is tentative.

Additional Information

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

University rules regarding registration, withdrawal, appealing marks, etc. can be found on the university's website, here: <https://calendar.carleton.ca/undergrad/regulations/academic-regulationsoftheuniversity/>

Copyright policy: Student or professor materials created for this course (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the author(s). They are intended for personal use.

Important Information

- Students must always retain a 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/all-services/email/carleton-student-email/>

Academic Accommodations

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 (e.g. religious, pregnancy, student activities) is known to exist. For more details, see <https://students.carleton.ca/services/accommodation/>

Accommodations for Students with Disabilities: If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC 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 your instructor as soon as possible to ensure accommodation arrangements are made. carleton.ca/pmc

Plagiarism

Plagiarism is presenting, whether intentionally or not, the ideas, expression of ideas, or work of others as one's own. 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 when an instructor suspects a piece of work has been plagiarized. For more details see: <https://carleton.ca/secretariat/wp-content/uploads/Academic-Integrity-Policy-2021.pdf>

For a list of dates and deadlines, including holidays and exam dates, please visit:

<https://carleton.ca/registrar/registration/dates/academic-dates/>

Additional Information Regarding COVID-19

All members of the Carleton community are required to follow COVID-19 prevention measures and all mandatory public health requirements (e.g. wearing a mask, physical distancing, hand hygiene, respiratory and cough etiquette) and [mandatory self-screening](#) prior to coming to campus daily.

If you feel ill or exhibit COVID-19 symptoms while on campus or in class, please leave campus immediately, self-isolate, and complete the mandatory [symptom reporting tool](#). For purposes of contact tracing, attendance will be recorded in all classes and labs. Participants can check in using posted QR codes through the cuScreen platform where provided. Students who do not have a smartphone will be required to complete a paper process as indicated on the [COVID-19 website](#).

All members of the Carleton community are required to follow guidelines regarding safe movement and seating on campus (e.g. directional arrows, designated entrances and exits, designated seats that maintain physical distancing). In order to avoid congestion, allow all previous occupants to fully vacate a classroom before entering. No food or drinks are permitted in any classrooms or labs.

For the most recent information about Carleton's COVID-19 response and required measures, please see the [University's COVID-19 webpage](#) and review the [Frequently Asked Questions \(FAQs\)](#). Should you have additional questions after reviewing, please contact covidinfo@carleton.ca

Please note that failure to comply with University policies and mandatory public health requirements, and endangering the safety of others are considered misconduct under the [Student Rights and Responsibilities Policy](#). Failure to comply with Carleton's COVID-19 procedures may lead to supplementary action involving Campus Safety and/or Student Affairs.