## **CGSC 2001A: Introduction to Cognitive Science**

# Institute of Cognitive Science, Carleton University Summer 2019

#### Course details & contact information

Dates: July 3rd to August 14th

Days: Mondays & Wednesdays Time: 2:35 pm to 5:25 pm

Location: TB 446

Instructor: Roxana M. Barbu

Email: roxanamariabarbu@cmail.carleton.ca

Office: Dunton Tower 2219

Office Hours: Mondays & Wednesdays: 5:30 pm to 6:30 pm

TA: Serena Remtulla-Langlois

Email: SerenaRemtullaLanglo@cmail.carleton.ca

## Course description & learning objectives

Welcome! This course is a broad introduction to the inter-disciplinary field of Cognitive Science. We will begin with an introduction to the topic. Broadly speaking, the goal of Cognitive Science is to understand how the mind/brain works. We will dive into various cognitive processes and learn about the concepts, methods, and tools used to shed light on them. 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 (though in my opinion, all disciplines are connected to Cognitive Science). By the end of this class, successful students will be able to:

- explain what Cognitive Science is and define terms related to it
- have an understanding of various cognitive processes (e.g., language acquisition)
- describe Cognitive Science theories and research
- compare and contrast inter-disciplinary findings to explain theories of cognition

By the end of this class, successful students will be able to add the following skills to their resume/cv:

- understanding of human cognition and behaviour
- ability to identify key papers and state of the art literature
- ability to synthesize and present information to a diverse audience
- basic understanding of the principles guiding UX research
- one or more lynda.com certificates

#### Textbook

There is no required textbook for this course. The reading materials will consist of journal articles and readings available through the library or open source and posted on cuLearn.

## Course Web Page (cuLearn)

The course website is located at https://carleton.ca/culearn/. On this site you will find the course syllabus, slides and any supplementary materials.

#### **Evaluation**

Test 2

**Reading questions**: I will provide a question based on that week's readings/content. You will respond to the question and hand in the answer during class time.

**Test 1**: The first test will cover content from the first portion of the course prior to test 1.

Test 2: The second test will focus on material not tested in test 1, though previous content may sneak in.

Final Exam: The final exam will be cumulative, covering content from the entire course.

**lynda.com certificates (or alternatives)**: may be completed at any point throughout the course. **Presentations**: you will pick a topic, collaborate with colleagues from a different field of study, and give a flash presentation explaining the topic and potential real-world applications. We will go over details in class, but one important requirement is that you must consult a minimum of

% What When Reading questions during class time 5% Test 1 20% July 15th

July 29th

20% Final exam 40% during the exam period lynda.com certificates 5% by August 14th

three peer reviewed articles in preparing the presentation.

Presentation 10% August 12th and August 14th

The tests and exam are based on (1) readings and supplementary materials; (2) course slides, which will be made available on cuLearn; (3) information presented during class, including class discussions; (4) information presented during the final presentations. Class attendance is strongly encouraged because information will be provided during class beyond that in the slides, including explanations of course themes, perspectives that are not in the readings or in the slides, hints for tests, etc. Furthermore, the reading questions will also be completed in class. Thus, if you miss a class, it is strongly recommended that you obtain a fellow student's notes from that class.

## **Test Deferral Policy**

If, for extraordinary reasons you must miss a test, please notify me 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. If no documentation is provided, you will receive a grade of zero for that test.

#### E-mail Protocol and Guidelines

I will respond to e-mails within 24 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.

## Regulations and Information Common to all Cognitive Science Courses

#### 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.

#### Withdraws

July 22, 2019: Last day for a full fee adjustment when withdrawing from late summer courses (financial withdrawal).

## Official final examination period

Late summer 2019: August 17-23, 2019. Final examinations in late summer and full summer courses may be held. Examinations are normally held all seven days of the week. All take home examinations are due on August 23, 2019, 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.

## Plagiarism

The University Senate defines plagiarism as "presenting, whether intentional or not, the ideas, expression of ideas or work of others as oneâĂŹs 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 anotherâĂŹs 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 courseâĂŹs instructor. 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:

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A+ = 90-100 A = 85-89 A - = 80-84
B+ = 77-79 B = 73-76 B - = 70-72
C+ = 67-69 C = 63-66 C - = 60-62
D+ = 57-59 D = 53-56 D - = 50-52
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F = Failure. No academic credit

**ABS** = Absent from the final examination

**DEF** = Official deferral (see "Petitions to Defer")

**FND** = "Failed, no Deferral" is 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.

#### Resources

Department of Cognitive Science (2522): 2221 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 2221 to discuss your program. Advisors can answer questions concerning:

- Course selection and meeting program requirements
- Your audit and transfer credits
- 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

# Course Schedule - tentative and subject to change

Date	Торіс
July 3rd	Introduction to Cognitive Science
	Landmark events
July 8th	Babies' brain
	Innateness
	Language acquisition
July 10th	The Cognitive Science of music
	The Cognitive Science of illusions
July 15th	review/catching up + test 1
July 17th	Embodied cognition
July 22nd	Brain imaging techniques
July 24th	Knowledge representation and cognitive models
July 29th	review/catching up + test 2
July 31st	Emotion
	The Cognitive Science of Love and Attraction
Aug 7th	Morality
	Responsibility and Heuristics
Aug 12th	Intro to UX research
	Presentations
Aug 14th	Presentations
	Review