

CGSC 3301(B): Language and Cognitive Science
Course Outline
Fall/Winter 2019-2020

Class Information

Dates: Tuesdays and Thursdays, Jan 6 – April 7
Time: 1:05pm-2:25pm
Location: Tory Building 234
Course prerequisites: Third-year standing and CGSC 2001 with a minimum grade of D-

Instructor Information

Instructor: Raj Singh
Office: DT2206A
Phone: 613-520-2600 x1778
E-mail: raj.singh@carleton.ca (students should use a Carleton email address when corresponding with the instructor and the TA).
Office Hours: Tuesdays and Thursdays, 12pm-1pm

Teaching Assistant:

Name: TBA
E-mail: TBA
Office hours: TBA

Course Description

This class will focus on *natural language understanding*. There is a lot of hype in the popular media about the ability of machines to understand language. Do they? What do we mean by understanding? How do we as humans understand language? We will develop a rigorous characterization of natural language understanding, and we will focus quite a bit on the relationship between questions and answers. An agent that knows some relevant information can be said to understand language if it can answer questions that it knows answers to. We will look at the literature from linguistics, AI, psychology, and philosophy, to probe the nature of systems that understand natural language (formally, conceptually, and experimentally).

Readings

There is no required textbook. All relevant materials will be given by in-class discussion, my own lecture notes, and journal articles that I may direct you to that are freely available.

Course Web Page

The course website is found on CULearn. Here you will find relevant announcements, the syllabus, relevant course materials, and a space in which you can discuss course content with your peers.

Evaluation

Your evaluation is based on four components: (i) One in-class presentation (either alone or in a group), (ii) A final paper (again, either alone or in a group), (iii) General attendance and participation in classes, and (iv) attendance at other students' presentations. I will lecture to bring us all up to a certain understanding of the material up until the February break. After the break, each student will lead discussion of a topic related to the class that they find interesting. They will also write a final

paper on this topic. The presentation is worth 30 percent of the grade, and the final paper is worth 50 percent. The date of your presentation will be determined after we determine how many people will be presenting individually and how many in groups, but it will take place sometime between February 25 and April 2. Your final papers will be due in class as a hard copy on April 7. Here is a tabular summary:

Item	Weight of Grade	Due date
Final paper	50%	April 7
Presentation	30%	After the fall break
Attendance and participation	10%	All classes
Attendance at peer presentations	10%	All presentations

Lecture Schedule (tentative)

Date	Lecture Topic	Readings
Jan 7, 9, 14, 16	Meaning and logical forms (LFs)	Lecture notes
Jan 21,23	Tutorials, discussions	Previous lecture notes
Jan 28, 30 & Feb 4, 6, 11, 13	Questions, answers, and LFs	Lecture notes
Feb 25, 27, Mar 3, 5, 10, 12, 17, 19, 24, 26, 31 April 2,7	Student presentations	N/A

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, 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 <http://carleton.ca/ccs/students/>

For a list of dates and deadlines, including holidays and exam dates, please visit:
<https://carleton.ca/registrar/registration/dates-and-deadlines/>