

PSYC*3280, Course Outline: Winter 2016

General Information

Course Title: Minds, Brains, Machines

Course Description:

This course is an introduction to foundational issues in cognitive science, the scientific study of the mind. We examine the unifying principle of cognitive science--that the mind is an information processor--and consider the various ways that foundational view has been articulated. While cognitive science is heavily indebted to psychology, it is more general, incorporating and developing out of work in computer science and mathematics, linguistics, philosophy, biology and anthropology as well as psychology. How such an interdisciplinary science has emerged and has developed is a part of what we will study in this course.

Credit Weight: 0.5

Academic Department (or campus): Psychology

Semester Offering: W16

Class Schedule and Location: Tues & Thurs. 4:00-5:20 MINS 300

Instructor Information

Instructor Name: Don Dedrick

Instructor Email: ddedrick@uoguelph.ca

Office location and office hours: Mackinnon Rm. 329 Office Hrs.: Tues. 1-2; Thurs. 2-3; by appointment.

Course Content

Specific Learning Outcomes:

- 1. Students will understand the basic assumptions and concepts of contemporary cognitive science.**
- 2. Students will be able to apply the concepts of contemporary cognitive science.**
- 3. Student will be able to summarize experimental and theoretical research that has contributed to the way cognitive science understands the mind.**
- 4. Students will comprehend and articulate, in written form, the different ideas about information processing that are used in cognitive science.**

5. Students will be able to critically assess the strengths and weaknesses of different information processing models used in cognitive science.
6. Students will be able to develop analytical approaches to contemporary debates in society and popular culture concerning the nature of cognition (e.g. "the singularity", uploading a mind, artificial intelligence, the uses of brain scanning technology, etc.).

Lecture Content:

This course takes place on Tues. and Thurs., W16, from 4-5:20.

The structure of the class is as follows (for exceptions see schedule below)

Tuesday. 4:00-4:15. Take up quiz from Thursday class. Lecture and discussion 4:15-5:20

Thursday. Lecture from 4:00-4:55. Break for 5 minutes. 5:00-5:20 Quiz on material for the week.

The quizzes will have different formats: T/F; MC; problem solving. Quizzes will be done in groups. They constitute a grade component for the course (see below for details).

Lectures will not cover all the material in a chapter, but you are expected, for assessment purposes to have read the chapter. That said, Midterm and Exam questions will focus mainly on the material discussed in class. The instructor will provide more detail prior to the Midterm and the Exam.

Text: "Cognitive Science" (CS), by Jose Luis Bermudez.

Week 1.

T: Introduction. TH: read CS CH. 1. No quiz.

Week 2.

T: read CS Ch. 2. TH: read CS Ch. 2. Quiz on Thursday.

Week 3.

T: read CS Ch. 3. TH: read CS Ch. 3. Quiz on Thursday.

Week 4.

T: read CS Ch. 4. TH: read CS CH. 4. Quiz on Thursday.

Week 5.

T: read CS Ch. 5. TH: read CS Ch. 5. Midterm topics distributed. Quiz on Thursday.

--READING WEEK Feb. 15-19. No classes.--

Week 6.

T: continuation of week 5, summary of the course to this point, questions about the midterm answered. TH: **MIDTERM.** No quiz.

Week 7.

T: read CS Ch. 6. TH: read Ch. 6. Quiz on Thursday.

Week 8.

T: Read CS Ch. 7 TH: read CS Ch. 7. Quiz on Thursday.

Week 9.

T: Read CS Ch. 8 TH: read CS Ch. 8. Quiz on Thursday.

Week 10.

T: Read CS Ch. 9 TH: read CS Ch. 9. Quiz on Thursday.

Week 11

T: Read CS Ch. 10 TH: read CS Ch. 10. Quiz on Thursday. [Written assignment due Friday of this week, in Dropbox. \(11:59pm at the latest\)](#)

Week 12

T: Read CS Ch. 12 TH: read CS Ch. 12. No quiz. Discussion of exam.

Course Assignments and Tests:

| Assignment or Test | Due Date | Contribution to Final Mark (%) | Learning Outcomes Assessed |
|--------------------|-------------------------------------|--------------------------------|----------------------------|
| Quizzes* | In class, each Thursday (see above) | 15% | 1,2,3 |
| Midterm^ | Feb. 25 | 25% | 1,2,3,4,5 |
| Written assignment | April 1 | 30% | 2,3,5,6 |
| Exam^ | April 18 | 30% | 1,2,3,4,5 |

Additional Notes :

*There will be 9 quizzes in total. The best 5 will count ($5 \times 3 = 15\%$). There are no makeup quizzes. Quizzes are done in groups and they will vary in nature. Students may submit individually. Any student that enters the class after a quiz has started will earn a grade of zero on that quiz. Any student that shows up just to write the quiz will write the quiz by him/herself. Write the names, first and last, of all students in the group on the quiz.

^The Midterm and the Exam will consist of [a] T/F questions, [b] MC questions, [c] short written answers.

Final examination date and time: April 18, 8:30-10:30am

Final exam weighting: 25%

Course Resources

Required Texts:

"Cognitive Science: An introduction to the science of the mind." Jose Luis Bermudez. Cambridge University Press. 2010 (First Edition). Available from the Bookstore.

Recommended Texts related material:

There is a website for the course on courselink, as usual. I will provide information about the course and copies of the PP slides used in class. These will be available before each class. All News about the course will be posted in the News section of the website. That is where I will post any changes or relevant information. All News will be sent to you by email, automatically.

There is a website for the book

<http://www.cambridge.org/features/bermudez/students/links_learning.htm>

This website has some of the articles discussed in the text, related texts, and experimental demonstrations. It is highly recommended as a resource, and the instructor may ask you to access it occasionally.

Course Policies

Grading Policies

No late work is accepted without an acceptable reason. If work is accepted there is no penalty. If it is not accepted the grade is Zero. To be clear: there is no daily or weekly penalty. Either work is accepted or it is not. Please contact the instructor as soon as you become aware you will miss a due date, or if you are encountering a problem that might make it difficult for you to complete a requirement.

Course Policy on Group Work:

The quizzes are done in groups. You are expected to contribute to the group discussion of the quizzes. Any student that enters the class after a quiz has started will earn a grade of zero on that quiz. Any student that shows up just to write the quiz will write the quiz by him/her self.

Course Policy regarding use of electronic devices and recording of lectures:

Electronic recording of classes is expressly forbidden. Laptops are permitted for course related use. Keep your phone in your pocket, purse, knapsack.

University Policies

Academic Consideration

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor in writing, with your name, id#, and e-mail contact. See the academic calendar for information on regulations and procedures for [Academic Consideration](#). [Academic Consideration, Appeals and Petitions](#)

Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community, faculty, staff, and students to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring.

University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection. Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar: [Academic Misconduct Policy](#)

Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact the Centre for Students with Disabilities as soon as possible.

For more information, contact CSD at 519-824-4120 ext. 56208 or email csd@uoguelph.ca or see the website: [Student Accessibility Services Website](#)

Course Evaluation Information - Please refer to the [Course and Instructor Evaluation Website](#)

Drop date - The last date to drop one-semester courses, without academic penalty, is Friday March 11. You will find the regulations and procedures for Dropping Courses in the current [Undergraduate Academic Calendar](#).