

PSYC*3280 Course Outline: Winter 2022

General Information

Course Title: Minds, Brains, Machines

Course Description:

We seem to have minds and to know certain things about mental processes and events (for example, that we can remember past experiences). We know that we have a brain and we (most of us) believe that strong versions of dualism (substance dualisms) are false and that there is a link between what goes on mentally and what goes on in the brain. This is the classic mind-brain problem in philosophy: what's the nature of the link? We also know that computers, which are (mostly) physical symbol systems capable of highly complex, thought-like computation point the way toward an understanding of how thought in a physical system could be possible. This is good news, in the sense that we seem to be such systems (thinking; physical). So there is an attractive hypothesis on offer: Our mind is like a program implemented by our brain which is in fact a computational device. Mind, brain, machine, all in one. It is the various flavors of this core idea, and with of AI (artificial Intelligence) in particular that we will be occupied with in this course.

Credit Weight: 0.5

Academic Department: Psychology

Semester Offering: W22

Class Schedule and Location: M & W 3:30-4:20 CRCS (Crop Sciences Bldg.) Rm 116.

Instructor Information

Instructor Name: Don Dedrick

Instructor Email: ddedrick@uoguelph.ca

Office location and office hours: Instructor will answer questions in a Teams meeting every Tuesday, 1-2. In person office hours may be available later in the term.

TA: Savannah Yerman

Email: syerman@uoguelph.ca

Specific Learning Outcomes:

1. Students will understand the basic assumptions and foundational ideas of contemporary AI, especially the idea that the mind/brain is a computational device.
2. Students will be able to apply basic concepts of AI.
3. Student will be able to summarize some experimental and theoretical research that has contributed to the way AI and cognitive science understands the mind.
4. Students will comprehend and articulate the different ideas about information processing that are used in AI and cognitive science.
5. Students will be able to critically assess the strengths and weaknesses of different conceptions of AI and their relationship to the mind.
6. Students will develop analytical approaches to contemporary debates about AI.

Lecture Content:

The instructor has provided readings and notes and other materials on courselink. For at least the first two weeks, the course will be virtual and on Teams. Links will be posted on courselink, and they will be sent to you through course announcements. The full description of the course content is provided in the "Content" section of the courselink site for his course. Other important information on the course is and will regularly be provided in the Announcements section on courselink. All announcements are sent to your @uoguelph.ca email.

PLEASE CHECK YOUR EMAIL ON A REGULAR BASIS.

Course Assignments and Tests:

Assignment or Test	DueDate	Contribution to Final Mark (%)	Learning Outcomes Assessed
Quizzes	-Quizzes almost every unit. You meet in a Teams group, during the Friday class.	15% (Best 7/9 count) See announcements for general details.	1,2,3
Midterm	Feb 16 50 minutes -T/F and MC questions	25%	1,2,3,4,5
Written assignments	#1 : Due Feb. 2, in Dropbox. #2: Due March 23, in Dropbox. Approx. 800-1000 words each on assigned topics.	15% x 2 = 30%	4,5,6
Exam	TBA 2 HR -T/F and MC (possibly short answers)	30%	1,2,3,4,5

Final examination date and time:

EXAM Mon

2:30PM – 4:30PM (2022/04/18) [start window]

RM: TBA

Confirm this with Webadvisor.

CourseResources

Online Texts available from
Courselink.

**Recommended Texts related
material:** see Courselink

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.

University Policies

Disclaimer:

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings, changes in classroom protocols, and academic schedules. Any such changes will be announced via CourseLink and/or class email. This includes on-campus scheduling during the semester, mid-terms and final examination schedules. All University-wide decisions will be posted on the [COVID-19 website](https://news.uoguelph.ca/2019-novel-coronavirus-information/) (https://news.uoguelph.ca/2019-novel-coronavirus-information/) and circulated by email.

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](#)

Illness

Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g., final exam or major assignment).

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 Accessibility Services as soon as possible.

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

Student Feedback Questionnaire

These questionnaires (formerly course evaluations) will be available to students during the last 2 weeks of the semester: March 28th – April 08th. Students will receive an email directly from the Student Feedback Administration system which will include a direct link to the questionnaire for this course. During this time, when a student goes to login to Courouselink, a reminder will pop-up when a task is available to complete.

[Student Feedback Questionnaire](#)

Dropdate

The last date to drop one-semester courses, without academic penalty, is Friday April 8.
For regulations and procedures for Dropping Courses, see the Academic Calendar: [Current Undergraduate Calendar](#).