

PHIL 399.23, Lecture 4 Topics in Philosophy: Artificial Intelligence Spring 2023 TR 09:00 – 11:45, ES 054

COURSE OUTLINE

Instructor Name: Brandon Beasley

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COURSE INFORMATION

Artificial Intelligence (AI) is currently both a 'hot topic' and big business. This course will delve into the philosophical issues raised by the very idea of AI, going beyond the hype to get at fundamental questions about the nature of mind, intelligence, and agency, as well as understand the history of philosophical and scientific attempts to answer those questions. We will look at AI from the perspective of the philosophy of mind and language, as well as examine its ethical, social, and political ramifications. Topics may include: the nature of mind and intelligence and whether machines or computers can genuinely be said to have minds or be intelligent; different approaches to AI and their possibility of success in exhibiting genuine 'general intelligence'; whether AI could ever be truly creative; whether AI can be aligned to human values; the social and political consequences of machine learning and algorithmic decision-making (e.g., in entrenching biases or existing unjust structures); whether an 'intelligent' machine could be morally responsible, and if not, who is to blame if something goes wrong with it; and whether AI represents an existential threat to the human race.

PREREQUISITE(S)

There are no prerequisites for this course.

COURSE OBJECTIVES/LEARNING OUTCOMES

- Understand the history of thought about mind and intelligence, in particular attempts to theorize and to build artificial intelligences, and how different conceptions of what mind and intelligence are influence conceptions of how to create artificial versions.
- Gain an understanding of the key philosophical, scientific, and social issues related to AI in order to critically evaluate current and future technological developments.
- Identify and appreciate the core philosophical issues, debates, and positions covered in the course and understand why they are important.
- Understand and critically respond to texts by identifying, extracting, and analyzing the philosophical arguments therein.
- Write clearly and cogently about the issues, views, and arguments covered in the course, including: summarizing arguments, critically evaluating arguments, and making new arguments.

REQUIRED/RECOMMENDED TEXTBOOKS, READINGS AND MATERIALS

The following book is required, and available through the University Bookstore (hard copy or ebook) or other booksellers:

• Artificial Intelligence: A Very Short Introduction, by Margaret Boden (OUP, 2018).

Note that the book was previously published as Boden, *AI: Its Nature and Future* (OUP, 2016). It is acceptable to use this version, too, though the pagination is different from the 2018 *Very Short Introduction* version. All other required readings will be available either through the library or posted on D2L.

ACADEMIC ACCOMMODATIONS & ACCESSIBILITY

I want you to do well and succeed in this course, but I know that life happens, and we are still living in a more difficult time than usual. Further, many of you may not yet have much experience taking an inperson course on campus. If you have any concerns about your ability to complete course readings or assignments—these might be personal, health-related (including mental health), family-related (e.g. care-giving), etc.—please email me or see me in office hours, because I am happy to discuss this with you. The sooner I know about these, the earlier we can discuss possible adjustments or alternative arrangements.

Students needing an Accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with procedure. Students needing an Accommodation in relation to their coursework based on a protected ground other than disability should communicate this need, preferably in writing, to me.

For further Academic Accommodation information, see below under "**Important Departmental, Faculty, and University Information**".

COURSE ASSESSMENT AND EVALUATION

Assessment Components

<u>Reading Questions</u>: Ten, worth 1% each, 10% total; **Due each class (with 3 exceptions).** <u>Critical Responses</u>: Two, worth 15% each, 30% total (1-2 pages); **Due on the day of the chosen reading.** <u>Mid-Term Assignment</u> (essay or written response): 30%; **Due May 30,. 2023** <u>End-of-Term Assignment</u> (essay or written response): 30%; **Due June 20,. 2023**

If at all possible, please print off and submit your assignments in hard copy, in class or in my office hours. Electronic submission on D2L will be available as an alternative. Regardless, please **do not** email me your assignment!

Writing and the grading thereof is a major factor in the evaluation of student performance. However, you have some flexibility when it comes to the format of course assignments, so long as you can demonstrate the appropriate knowledge, understanding, and critical thought. I will explain more about this in class.

There will be no in-class mid-term exams nor a registrar-scheduled final exam.

Marking Scheme

Assignments will be graded on a scale from A+ to F per the following standard. I will post a grading rubric on D2L. To weight assignments and calculate the final grade, letter grades will be converted into the standard 4.0 scale:

Grade	Grade Point Value	Description
A+	4.30	Outstanding performance.
А	4.00	Excellent performance.
A-	3.70	Approaching excellent performance.
B+	3.30	Exceeding good performance.
В	3.00	Good performance.
B-	2.70	Approaching good performance.
C+	2.30	Exceeding satisfactory performance.

С	2.00	Satisfactory performance.
C-	1.70	Approaching satisfactory performance.
D+	1.30	Marginal pass.
D	1.00	Minimal pass.
F	0.00	Failure. Did not meet requirements.

The arithmetic used to calculate your final grade will follow this formula:

(Reading Questions x 0.10) + (Critical Responses x 0.30) + (Mid-Term Paper x 0.30) + (Final Paper x 0.30) = Final Grade

Notwithstanding the above, in cases of a significant rising trajectory, later work will be weighted more heavily than earlier work.

Note that, per University of Calgary regulations, the highest possible Grade Point Value for your final course grade is 4.0, even if you are awarded an A+. However, should you get an A+ on an individual assignment, I will treat its value as 4.3.

Late Assignments

Every student is entitled to **up to four (4) no-questions-asked grace days** (including Saturdays and Sundays) during the semester, to be used at your discretion. You **do not** need to contact me to use these grace days, but the rules about submission of assignments still apply; i.e., don't email them to me unless we talk first.

However, **if you use these up, then you must notify me if you will be handing in work late**. If you talk to me about it, we will work something out and there won't be any late penalty. If you do not, then late assignments will be penalized one grade-step per day, i.e., a B+ assignment handed in one day late would receive a B, or if two days late, a B-, and so on.

CLASS POLICIES

Email

I only check my email between 8am and 5pm Monday-Friday and once on Sundays. However, since I also don't get email notifications on my phone, **feel free to email me at any time**, but please allow 24-36 hours for me to respond. I may respond more quickly than that sometimes, but don't assume that I will. I know the odd work hours students sometimes need to put in, so don't worry about emailing me at 2am—just know that I won't see it until later.

Electronic Devices

You are all adults and are best placed to know what you need to do to succeed. Some studies have shown that, for those who are able, avoiding the distraction of devices and taking notes by hand improves learning and course success.¹ However, there are always exceptions to generalizations, and these studies aren't relevant to those with accessibility needs. As such, you should make the choice that works best for you, and I won't assume anything about you based on your use or non-use of technology. However, because a significant part of class involves participation and discussion, I would hope that any devices would not distract you from full participation, nor be a distraction to your classmates. Please be courteous to your classmates and myself, and be aware of how your use of devices might affect them, and me.

Further, **please do not** use such devices to send messages, use social media, or play games during class. It is disrespectful to me and your classmates. You have lots of time to do that outside of class, so when

¹ Pam A. Mueller & Daniel M. Oppenheimer, The Pen is Mightier than the Keyboard: Advantages of Longhand Over Laptop Note Taking, *Psychological Science* 25: 6 (2014), 1159-1168.

we're all together, let's devote ourselves fully to the consideration of these fascinating philosophical questions.

Class Lectures and Discussions

I will strive to provide an environment that is equitable and conducive to constructive learning and discussion for all students. I ask that we all be respectful of class members and their contributions to the discussion regardless of personal attribute. We should all remember that it is the *argument*, not the person, that is the focus of criticism—something both those advancing an argument and those critiquing it should keep in mind. Together we can explore ideas, try out arguments, disagree respectfully, get confused, dispel confusion, make mistakes, learn from mistakes, and ultimately learn from the philosophers we read and from each other—and hopefully have fun, too. It is always important that we engage each other respectfully. Our proper foci are the propositions, theories, and arguments, not the person or people. Further—and this is very important—we're all human, and so fallible and liable to make honest mistakes. Let's approach each other with a 'hermeneutic of magnanimity' and the principle of charity: to assume the best of intentions on the part of others, and to attribute to them the best version of the claim they're making.

IMPORTANT DEPARTMENTAL, FACULTY AND UNIVERSITY INFORMATION

Academic Accommodations

It is the student's responsibility to request academic accommodations according to the University policies and procedures. The student accommodation policy can be found at <u>ucalgary.ca/legal-</u><u>services/sites/default/files/teams/1/Policies-Student-Accommodation-Policy.pdf</u>.

Students needing an Accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities: <u>ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Accommodation-for-Students-with-Disabilities-Procedure.pdf</u>. Students needing an Accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to their instructor.

Absence or Missed Course Assessments

Students who are absent from class assessments (tests, participation activities, or other assignments) should inform their instructors as soon as possible. If the reason provided for the absence is acceptable, instructors may decide that any arrangements made can take forms other than make-up tests or assignments. For example, the weight of a missed grade may be added to another assignment or test.

Student Support and Resources

Full details and information about the following resources can be found at <u>ucalgary.ca/current-students/student-services</u>

- Wellness and Mental Health Resources
- Student Success Centre
- Student Ombuds Office
- Student Union (SU) Information
- Graduate Students' Association (GSA) Information
- Emergency Evacuation/Assembly Points
- Safewalk

Academic Advising

If you are a student in the Faculty of Arts, you can speak to an academic advisor in the Arts Students' Centre about course planning, course selection, registration, program progression and more. Visit the Faculty of Arts website at <u>https://arts.ucalgary.ca/current-students/undergraduate/academic-advising</u> for contact details and information regarding common academic concerns.

For questions specific to the philosophy program, please visit <u>arts.ucalgary.ca/philosophy</u>. Further academic guidance is available by contacting Jeremy Fantl (Undergraduate Program Director <u>ifantl@ucalgary.ca</u>) or David Dick (Honours Advisor <u>dgdick@ucalgary.ca</u>).

Writing Assessment and Support

The assessment of all written assignments—and, to a lesser extent, written exam responses—is based in part on writing skills. This includes correctness (grammar, punctuation, sentence structure, etc.), as well as general clarity and organization. Research papers must include a thorough and accurate citation of sources. Students are also encouraged to use Writing Support Services for assistance. For more information, and other services offered by the Student Success Centre, please visit <u>ucalgary.ca/student-services/student-success</u>.

Required Technology

In order to successfully engage in their learning experiences at the University of Calgary, students taking online, remote, and blended courses are required to have reliable access to the following technology:

- A computer with a supported operating system, as well as the latest security, and malware updates;
- A current and updated web browser;
- Webcam (built-in or external);
- Microphone and speaker (built-in or external), or headset with microphone;
- Current antivirus and/or firewall software enabled;
- Broadband internet connection.

Most current laptops will have a built-in webcam, speaker and microphone.

Responsible Use of D2L

Important information and communication about this course will be posted on D2L (Desire2Learn), UCalgary's online learning management system. Visit https://ucalgary.service-now.com/it for how-to information and technical assistance.

All users of D2L are bound by the guidelines on the responsible use of D2L posted here: https://elearn.ucalgary.ca/commitment-to-the-responsible-use-of-d2l/. The instructor may establish additional specific course policies for D2L, Zoom, and any other technologies used to support remote learning. Instructional materials, including audio or video recordings of lectures, may not be posted outside of the course D2L site. Students violating this policy are subject to discipline under the University of Calgary's Non-Academic Misconduct policy.

Media Recording

Please refer to the following statement on media recording of students: <u>https://elearn.ucalgary.ca/wp-content/uploads/2020/05/Media-Recording-in-Learning-Environments-OSP_FINAL.pdf</u>

Academic Misconduct/Honesty

Cheating or plagiarism on any assignment or examination is as an extremely serious academic offense, the penalty for which will be an F on the assignment or an F in the course, and possibly a disciplinary sanction such as probation, suspension, or expulsion. For information on academic misconduct and its consequences, please see the University of Calgary Calendar at ucalgary.ca/pubs/calendar/current/k.html.

Intellectual honesty requires that your work include adequate referencing to sources. Plagiarism occurs when you do not acknowledge or correctly reference your sources. If you have questions about referencing, please consult your instructor.

University Policies

The Instructor Intellectual Property Policy is available at <u>ucalgary.ca/legal-</u> <u>services/sites/default/files/teams/1/Policies-Intellectual-Property-Policy.pdf</u>

The University of Calgary is under the jurisdiction of the provincial Freedom of Information and Protection of Privacy (FOIP) Act, as outlined at <u>https://www.ucalgary.ca/legal-services/access-information-privacy</u>. The instructor (or TA) must return graded assignments *directly* to the student UNLESS written permission to do otherwise has been provided.

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (<u>https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Acceptable-Use-of-Material-Protected-by-Copyright-Policy.pdf</u>) and requirements of the copyright act (<u>https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html</u>).