

**THE UNIVERSITY OF WESTERN ONTARIO**  
**DEPARTMENT OF PHILOSOPHY**  
**Undergraduate Course Outline**  
**Philosophy 2037G: Philosophy and Artificial Intelligence**

Winter 2020  
W 11:30-1:30 UCC 37  
Tutorials F 11:30-12:30 AHB 1B04, 1B08, 2B02

Instructor: Professor Michael Anderson  
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Office hours: Tuesday 1:00-2:30, Wednesday 2:00-3:30, and by appointment

### **DESCRIPTION**

Will robots take all our jobs? Will humans become cyborgs? As we rely more and more on machines and other new technologies, they are changing how we interact with the world and one another. In this course we will consider the impact of artificial intelligence on our current lives, and on our future. It has been said that “Philosophy will be the key that unlocks artificial intelligence”—presumably for the better. On the other hand, the Oxford philosopher Nick Bostrom has warned that advances in superintelligence may soon make humans obsolete. Who should we believe? This course will address these and other issues by first considering some traditional questions in philosophy of mind—e.g., Can a robot think? What is the Turing Test? Can machines ever be conscious?—before turning to a consideration of some of the ethical and social implications of this new technology.

### **TEXTS**

Cunningham, J., Hilliaer, S. & O’Reardon, D. eds. (2014). *Introducing Philosophy: Questions and Readings*. Toronto: Edmund Montgomery Publications.

Boden, M. (2016). *AI: Its Nature and Future*. Oxford: Oxford University Press.

Reserve readings as assigned.

### **OBJECTIVES**

The goal of this course is to familiarize students with some of the philosophical challenges posed by advances in the field of artificial intelligence (AI). By the end of the course, students will have a better understanding of the nature and scope of AI and the metaphysical, ethical and social implications of various forms and applications of AI. Students will also be in a position to take more advanced courses in a number of different areas of philosophy, including but not limited to, Philosophy of Science, Philosophy of Technology, Philosophy of Mind, and Ethics.

### **REQUIREMENTS**

- Regular Attendance (you will lose 1% of the final grade for every Tutorial missed without accommodation)
- Class participation
- 4 Online quizzes (5% each)
- 2 short papers (15% paper 1; 25% paper 2)

- Midterm exam (15%); Final exam (25%)

## **DEPARTMENT OF PHILOSOPHY POLICIES**

The **Department of Philosophy Policies** which govern the conduct, standards, and expectations for student participation in Philosophy courses is available in the Undergraduate section of the Department of Philosophy website at

<http://uwo.ca/philosophy/undergraduate/proceduresappeals.html>. It is your responsibility to understand the policies set out by the Senate and the Department of Philosophy, and thus ignorance of these policies cannot be used as grounds of appeal.

## **ACCOMMODATION**

Students seeking academic accommodation on medical grounds for any missed tests, exams, participation components and/or assignments worth 10% or more of their final grade must apply to the Academic Counselling office of their home Faculty and provide documentation. Academic accommodation cannot be granted by the instructor or department. Documentation shall be submitted, as soon as possible, to the Office of the Dean of the student's Faculty of registration, together with a request for relief specifying the nature of the accommodation being requested. The UWO Policy on Accommodation for Medical Illness and further information regarding this policy can be found at

[http://uwo.ca/univsec/pdf/academic\\_policies/appeals/accommodation\\_medical.pdf](http://uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf).

## **SELF- REPORTED ABSENCE FORM**

Students who experience an unexpected illness or injury or an extenuating circumstance (48 hours or less) that is sufficiently severe to temporarily render them unable to meet academic requirements (e.g., attending lectures or labs, writing tests or midterm exams, completing and submitting assignments, participating in presentations) should self-declare using the online Self-Reported Absence portal. This option should be used in situations where the student expects to resume academic responsibilities within 48 hours or less.

The following conditions are in place for self-reporting of medical or extenuating circumstances: [http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#SubHeading\\_322](http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#SubHeading_322)

## **EVALUATION OF ACADEMIC PERFORMANCE**

At least three days prior to the deadline for withdrawal from a course without academic penalty, students will receive assessment of work accounting for at least 15% of their final grade.

## **COURSE ASSIGNMENT**

The last day of scheduled classes in any course will be the last day on which course assignments will be accepted for credit in a course. Instructors will be required to return assignments to students as promptly as possible with reasonable explanations of the instructor's assessment of the assignment.

## **LATE WORK**

Work turned in late without academic accommodation will have 5% of the final score deducted for each day it is late. Missed tests/quizzes without academic accommodation will receive a zero.

## ACADEMIC OFFENCES

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at [http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/scholastic\\_discipline\\_undergrad.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf)

## PLAGIARISM CHECKING

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com <http://www.turnitin.com>.

## SUPPORT SERVICES

Registrarial Services <http://www.registrar.uwo.ca>

Student Support Services <https://student.uwo.ca/psp/heprdweb/?cmd=login> Services provided by the USC <http://westernusc.ca/services/>

Student Development Centre <http://www.sdc.uwo.ca/>

Students who are in emotional/mental distress should refer to Mental Health@Western <http://www.uwo.ca/uwocom/mentalhealth/> for a complete list of options about how to obtain help. Immediate help in the event of a crisis can be had by phoning 519.661.3030 (during class hours) or 519.433.2023 after class hours and on weekends.

## COURSE SCHEDULE (subject to change with sufficient notice)

**Jan 8:** Course Introduction, Basic Philosophy of AI

**Readings:** Boden Ch 1

**Jan 15:** Basic History of AI

**Readings:** Introducing Philosophy (IP) Ch 1 (pp. 3-18); Boden Ch 2; Bostrom "When machines outsmart humans" <https://nickbostrom.com/2050/outsmart.html>

First Tutorial: Philosophy Skills 1

**Readings:** Introducing Philosophy (IP) pp. 183-185

**Jan 22:** Basic Metaphysics

**Readings:** IP Ch 2 (pp. 19-32); pp. 35-48

**Before Class:** Take online quiz 1

Second Tutorial

**Readings:** IP Ch 6 (pp. 128-137); pp. 186-191

**Jan 29:** Theory of Computation

**Readings:** Boden Ch 4; Hillis *The Pattern on the Stone* pp. vii-38.

**Before Class:** Take online quiz 2

Third Tutorial

**Readings:** None; review theory of computation

**Feb 5:** Basic Epistemology

**Readings:** IP Ch 7-8 (pp. 148-182)

**Before Class:** Take online quiz 3

Fourth Tutorial

**Readings:** Turing, "Computing machinery and intelligence" sections 1, 2 & 6

**Feb 12:** Basic Ethics

**Readings:** IP Ch. 10-11 (pp. 195-212; 239-254; 283-295 only)

**Before Class:** Take online quiz 4

Fifth Tutorial: Philosophy Skills 2

**Readings:** IP pp. 296-325

**Feb 19:** Reading Week

**Readings:** None

**Feb 21:** Reading Week

**Readings:** None

**Feb 26: MID-TERM EXAM**

**Readings:** None

Sixth Tutorial: Philosophy Skills 3: **writing your first paper!**

**Readings:** None

**Mar 4:** Introduction to Theories of Justice

**Readings:** IP Ch 14 (pp. 390-421)

**FIRST PAPER DUE**

Seventh Tutorial: Philosophy Skills 4

**Readings:** IP pp. 422-428

**Mar 11:** AI and the Law

**Readings:** Boden Ch 6; Schwitzgebel & Garza “Designing AI with rights, consciousness, self-respect and freedom” <http://www.faculty.ucr.edu/~eschwitz/SchwitzPapers/AIRights2-180604.pdf>

Eighth Tutorial

**Readings:** Rini “Raising good robots” <https://aeon.co/essays/creating-robots-capable-of-moral-reasoning-is-like-parenting>

**Mar 18:** AI and Labour

**Readings:** Boden Ch 7; Danaher “Will life be worth living in a world without work? Technological unemployment and the meaning of life”

**Mar 21:** Ninth Tutorial

**Readings:** Walsh, “Will robots bring about the end of work?”  
<https://www.theguardian.com/science/political-science/2017/oct/01/will-robots-bring-about-the-end-of-work>

**Mar 25:** AI and Equality

**Readings:** Burkell, “The Challenges of Algorithmic Bias”; Pasquale, *The Black Box Society* ch 2.

**Mar 28:** Tenth Tutorial

**Readings:** “Ontario Basic Income Pilot” <https://www.ontario.ca/page/ontario-basic-income-pilot>  
Harris, “How technology hijacks people’s minds” <http://www.tristanharris.com/essays/>

**Apr 1:** The Future of AI

**Readings:** Dennett “The practical requirements for making a conscious robot”

**FINAL PAPER DUE**

**CLASSES END APR 3 – NO ASSIGNMENTS CAN BE ACCEPTED AFTER THAT DAY**