

WESTERN UNIVERSITY
DEPARTMENT OF PHILOSOPHY
Undergraduate Course Outline 2022-23

PHILOSOP 2037F
Philosophy and Artificial Intelligence

Fall Term	Instructor: Michael Barnes, PhD
Weekly <i>Asynchronous</i> Lectures, <i>online</i>	michael.barnes@uwo.ca
Weekly <i>Synchronous</i> Tutorials, <i>in person</i>	Zoom drop-in hours: Wed: 9:30-11am (also available by appointment)

TAs: Owen Chevalier, Madhavi Mohan, Erlantz Exteberria, Heather Champion, Fabio Malfara

TUTORIAL SECTIONS

002: Th. 9:30-10:30am in PAB-117

005: Fr. 11:30am-12:30pm in SH-3307

003: Th. 12:30-1:30pm in PAB-36

006: Th. 1:30-2:30pm in SH-3305

004: Fr. 10:30-11:30am in SH-3307

DESCRIPTION

Will robots take all our jobs? Will humans become cyborgs? Will nano-technology revolutionize medicine? As we rely more and more on algorithms, 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. But others worry that advances in superintelligence may soon make humans obsolete. Who should we believe? This course will address these and other issues by considering some traditional questions in philosophy of mind—e.g., Can a robot think? What is the Turing Test? Can machines ever be conscious?—as well as some of the major ethical and social implications of this new technology.

REQUIRED TEXTS

Coeckelbergh, Mark (2020). *AI Ethics*. MIT Press. (Available online via lib.uwo.ca)

+ Reserve readings as assigned, posted on OWL: <http://owl.uwo.ca>

RECOMMENDED TEXT

Gerald Graff and Cathy Birkenstein. “*They Say / I Say*”: *The Moves That Matter in Academic Writing*. W.W. Norton & Company. [note: I use the 3rd edition, but most editions are fine.]

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.

COURSE ASSIGNMENTS (NOTE: percentages are approximations, see **course requirements** below)

- Attendance at Tutorials (~10%)
- 3–4 Reading Reflections (approx. 400 words) (~5% each)
- 1–2 short papers (approx. 1,000 words each) (~20% each; or ~40% if completing C bundle)
- 0–2 Philosophy Meme Posts (approx. 300 words) (~5% each)
- A Final exam (format: online, at home, multiple choice and short answer questions) (~20%)

METHOD OF EVALUATION

This course uses an *achievement-based* approach to grading (also sometimes called ‘specification grading’ that focuses on satisfactory completion of assignments rather than the degree of assignment quality. In short, assignments are graded as complete or incomplete, rather than on an A-F scale. If a submission meets all of the standards specified in the instructions, then it is complete; if it does not, then it is incomplete. You will have the opportunity to revise and resubmit your assignments and will be given 3 tokens at the beginning of the semester that can exchange to do so (you must email your TA to use a token). You can also acquire more tokens by submitting work that significantly exceeds the standards specified in the assignment (i.e., receives ‘superior.’)

Your final grade is determined by the bundle of assignments you complete (these are specified in **Course Requirements** below). All the standards specified in the bundle must be met to get the corresponding grade. Higher grades require that you do more work, and more demanding work.

Some benefits of this approach are that it (1) is more transparent with fewer surprises, (2) promotes higher quality work and helps ensure that course learning objectives are met, (3) more closely reflects the nature of real-world evaluation, (4) affords students more control over how they participate in the course and what they get out of it, and (5) rewards learning and improvement.

Evaluation Scheme				
	PASS: Assignment is added to your bundle		FAIL: Assignment is <u>not</u> added to your bundle	
	Superior	Satisfactory	Needs Improvement	Unsatisfactory
Evaluation	Exceeds assignment standards	Meets assignment standards	Does not meet one or more assignment standards	Does not meet standards and indicates a serious lack of engagement with the course
Corresponding Token Policy	Gain 1 Token for each Superior assignment	N/A	Can resubmit by handing in 1 Token	Can resubmit by handing in 2 Tokens
In general, the feedback you receive on assignments will be both corrective and forward looking. As such, if you are completing the assignments adequately, feedback will be fairly minimal. If there are aspects of your assignments that need to be improved, you will be provided guidance on how to do that. NOTE: It makes no difference to your final grade whether you complete an assignment on the first try or on a resubmission.				

COURSE REQUIREMENTS

The requirements for the course vary based on which bundle you decide to pursue. The following table specifies the requirements for each bundle. Keep in mind that you may not succeed in your initial attempt at completing a given type of assignment so plan accordingly. Most importantly, **be sure to carefully read the instructions for each assignment as these determine the standards against which you will be evaluated.**

GRADE REQUIREMENT BUNDLES		
<i>Requirements for an A grade:</i>	<i>Requirements for an B grade:</i>	<i>Requirements for a C or D grade:</i>
4 x Reading Reflections completed (400 – 500 words each)	4 x Reading Reflections completed (400 – 500 words each)	3 x Reading Reflections completed (400 – 500 words each)
Paper 1 completed and met ‘superior’ expectations	Paper 1 completed and met ‘satisfactory’ expectations	Paper 1 or Paper 2 completed and met ‘satisfactory’ expectations
Paper 2 completed and met ‘superior’ expectations	Paper 2 completed and met ‘satisfactory’ expectations	
2 x Philosophy Meme Posts completed (300-400 words each)	1 x Philosophy Meme Posts completed (300-400 words each)	N/A
Attendance at a minimum of 9 Tutorials	Attendance at a minimum of 7 Tutorials	Attendance at a minimum of 5 Tutorials
80 points or higher on Final Exam	70 points or higher on Final Exam	60 points or higher on Final Exam (lower than 40 will result in a D grade)
<p>The A- Option: If you receive ‘superior’ on one but not both of your papers, and have otherwise completed the requirements for the A bundle, you will enter the exam with a B+ and will be eligible for a final grade of an A- if you score 85+ on the exam.</p>		
<p>Failure to satisfy D-level standards will result in an F.</p>		
<p>“+’s” & “-’s”: If you earn 15 points <i>higher</i> on the final exam than the minimum needed to earn the term grade you are otherwise qualified to earn, you will earn a “+” on your term letter grade. If you earn 15 points <i>lower</i> on the final exam than the minimum needed to earn the term grade you are otherwise qualified to earn, you will earn a “-” on your term letter grade.</p>		
<p>Example: If you satisfactorily completed both of your papers, have completed 4 weekly reflections, and completed at least one Meme Post, you are qualified to earn a B for the semester. If you earn 85 points or more on the final exam, your final grade will be a B+.</p>		
<p>NOTE: Students <i>must</i> turn in (though not necessarily pass) at least 1 Reading Reflection and Short Paper 1 by October 28th (the Friday before Fall Reading Week)</p>		

FINAL GRADES

Because final grades at Western are reported in percentages, we will convert the letter grade you receive into a percentage grade at the end of the course. Your letter grade is determined by the assignments you complete and the results of your exam, and that information determines number that appears on the transcript. Following the university's [chart](#), and choosing the middle of each distribution, this course uses the following:

A+ = 95	B+ = 78	C+ = 68	D+ = 58
A = 87	B = 75	C = 65	D = 55
A - = 82	B- = 71	C - = 61	D - = 61

RESUBMISSION POLICY

If you submit an assignment that is evaluated as not satisfactory, you may resubmit the assignment in exchange for 1 or more tokens (see **Evaluation Scheme** above for details). To do this, you must email your TA to (1) notify them that you plan to use your tokens as well as when you plan to turn in your resubmission. (Standardly, you are given 1 week from when the assignment is returned to you to resubmit.) You will then have an opportunity to revise your submission and have it reevaluated. If the resubmission receives 'satisfactory,' it will count as complete and be added to your grade bundle. If it is 'superior,' it will count as complete, and you will also receive an additional token. **Please note that most of the mistakes students make are often easily avoided by carefully reading the instructions for the assignment. Be sure to use the Specification Checklist (posted on OWL) for each assignment before submitting it.**

LATE POLICY

Deadlines are somewhat arbitrary. Nevertheless, they are helpful for promoting good time management and active engagement with the course. I also understand that life happens, and I do not want to make things harder for you, your TA, or myself, with strict due dates. It's more important to me *that* you to produce quality work—I don't particularly care about *when* (within the confines of the course). You also know *the rest* of your schedule better than me, and it's useful for you to manage your time so you do not have to do too much at once. For this reason, I have designed my late policy to reflect these facts. **The token system enables you to exercise control over when you turn in your assignments.** If you need an extension of up to 4 days on an assignment, **simply send your TA an email and let them know as soon as possible.** We will grant extensions without token penalty as long as they are requested 2 or more days prior to the due date. Extension requested less than 2 days prior to the deadline will be granted in exchange for 1 token. Extension requested after the deadline will be granted in exchange for 2 tokens.

You do not need to provide any personal information to receive an extension on your assignment, you simply need to say the new date by which when you will get the assignment in. To make this simple for everyone, please use the following template when writing your email:

Hello [your TA's name],
I need more time to submit [name of assignment]. I plan to submit this assignment by [new due date you are giving yourself]. Thank you.
Sincerely,
[Your Name]

If you are requesting an **extension of more than 4 days**, you still must propose a new due date for the assignment based on when you think you can have it completed by—and here, and only here, do you need to explain your special circumstances. If the due date is reasonable, given the circumstances, we will grant it. This will be your new due date and you must complete your assignment by then.

Overall Token Policy			
Gaining Tokens	Students receive 3 tokens at the beginning of the semester	Students will receive 1 token for each ' Superior ' assignment	
Handing Tokens In	0 Tokens	1 Token	2 Tokens
Resubmissions	N/A	For an assignment evaluated as Needs Improvement	For an assignment evaluated as Unsatisfactory
Extensions	When requested 2+ days prior to the deadline	When requested 0-2 days prior to the deadline	When requested after the deadline

TUTORIAL PREPARATION & PARTICIPATION

Because grading participation is rife with difficulties, this class does not include 'mandatory and graded participation.' At the same time, participation in tutorials is a key component of philosophical learning and coming prepared to tutorials will enable you to get the most out of your time there. To encourage and facilitate these benefits, you have chance to earn up to 10 bonus points on your final exam by submitting discussion questions or comments to your TA, in advance on the course website. The details of this will be discussed in your first tutorial session.

CONTACTING ME

I will respond to any email that includes a question or request. Expect a response within 48 hours of sending me a message. (You will probably want to factor in this timeframe when considering how quickly you'd like a response to your message.) If, for some reason, I do not get back to you within 48 hours, you should feel free to follow up.

AUDIT

Students wishing to audit the course should consult with the instructor prior to or during the first week of classes.

DEPARTMENT OF PHILOSOPHY POLICIES

The Department of Philosophy policies that govern the conduct, standards, and expectations for student participation in Philosophy courses are available in the Undergraduate section of the Department of Philosophy website <http://uwo.ca/philosophy/undergraduate/policies.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.

ACCESSIBLE EDUCATION

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Accessible Education at http://academicsupport.uwo.ca/accessible_education/index.html if you have any questions regarding accommodations.

EVALUATION OF ACADEMIC PERFORMANCE

At least three days prior to the deadline for withdrawal from a course without academic penalty, students will receive an assessment of work accounting for at least 15% of their final grade. For 3000- or 4000-level courses in which such a graded assessment is impracticable, the instructor(s) must obtain an exemption from this policy from the Dean and this exemption must be noted on the corresponding course syllabus. In rare instances and at the Dean's discretion, other courses could receive a similar exemption, which also must be noted in the course syllabus.

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 the following Web site: 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.

COURSE SCHEDULE

Week 1: Course Introduction

Readings:

- *AI Ethics*, Ch 1;
- Piper, "[The Case for Taking AI Seriously as a Threat to Humanity](#)," *Vox*

Note: No tutorials on Sept 8/9

Week 2: Some Questions in Philosophy of AI; Superintelligence

Readings:

- *AI Ethics*, Ch 2–3;
- Bostrom "[When machines outsmart humans](#),"

Suggested:

- Johnson et al., "Doing 'Ethics'," from *Computer Ethics*
- Listen to: "[Artificial Intelligence](#)," from *The End Of The World with Josh Clark*

Sept 15/16 – Tutorial 1

Week 3: A Quick History of AI: From 'Thinking Machines' to 'Learning Machines'

Readings:

- *AI Ethics*, Ch 5-6;
- Heaven, "[Why GPT-3 is the best and worst of AI right now](#)," *MIT Technology Review*
- Harris, "[How technology hijacks people's minds](#),"

Suggested:

- Samuel "[AI's Islamophobia Problem](#)," *Vox*
- Listen to: "[AI's Anti-Muslim bias problem](#)" *Recode*

Sept 22/23 – Tutorial 2

Week 4: Manipulation, Attention, and (Social) Epistemology in Online Spaces

Readings:

- Nguyen, "[Escape the Echo Chamber](#)," *Aeon*
- Odell, "[How To Do Nothing](#),"

Suggested:

- Owens, "[The Age of Post-Authenticity and the Ironic Truths of Meme Culture](#),"

Sept 29/30 – Tutorial 3 – *Reading Reflection #1* due

Week 5: Social Media and Ethics

Readings:

- Bhargava & Velasquez, “Ethics of the Attention Economy: The Problem of Social Media Addiction,” *Business Ethics Quarterly*
- Bloom and Jordan, “[Are we all harmless torturers now?](#)” *New York Times*
- Tufecki, “[It’s the Democracy Poisoning Age of a Free Speech,](#)” *Wired*

Suggested:

- Lynch, “The Outrage Factory,” from *Know-It-All Society*;

Oct 6/7 – Tutorial 4 – **Philosophy Meme Post #1** due

Week 6: Data, Privacy, and Power

Readings:

- *AI Ethics*, Ch 7;
- Véliz, “[Privacy is Power,](#)” *Aeon*

Oct 13/14 – Tutorial 5 – **Reading Reflection #2** due

Week 7: AI and Opacity

Readings:

- Pasquale, “Digital Reputation in an Era of Runaway Data,” from *The Black Box Society*;
- Knight, “[The Dark Secret at the Heart of AI,](#)” *MIT Technology Review*
- Kirchner and Goldstein, “[Access Denied: Faulty Automated Background Checks Freeze Out Renters](#)”

Suggested:

- Danaher “[What's happening inside the black box? 3 forms of algorithmic opacity](#)”

Oct 20/21 – Tutorial 6 – **Short Paper #1** due

Week 8: AI and Bias

Readings:

- *AI Ethics*, Ch 8–9, pt. 1;
- Burkell, “The Challenges of Algorithmic Bias”;
- Basu, “The Specter of Normative Conflict: Does Fairness Require Inaccuracy”

Suggested:

- Angwin et al., “[Machine Bias,](#)” *ProPublica*,
- Listen to: [Risky Business](#) from *Hi-Phi Nation*

Oct 27/28 – Tutorial 7 – **Reading Reflection #3** due

READING WEEK: At least one Reading Reflections and Short Paper 1 *MUST* be turned by the Friday before Reading Week.

Week 9: AI and Labour

Readings:

- *AI Ethics*, Ch 9, pt. 2;
- Walsh, “[Will robots bring about the end of work?](#)”
- Taylor, “[The Automation Charade](#),” *Logic Magazine*
- Danaher, “The Case for Technological Unemployment,” from *Automation and Utopia*
- Watch: Aaron Bastani, “Fully Automated Luxury Communism”

Suggested:

- Listen to: ‘AI in Hiring,’ mini-series from *In Machines We Trust*, by MIT *Technology Review*.
 - [“Hired by an Algorithm,”](#)
 - [“Want a job? The AI will see you now,”](#)
 - [“Playing the AI job market,”](#)
 - [“Beating the AI hiring machines,”](#)
- Jones, “[Artificial intelligence quietly relies on workers earning \\$2 per hour,](#)”
- Watch: [Humans Need Not Apply](#)
- Watch: [The Rise of the Machines](#)
- Dragicevic, “[“Our boss is an algorithm who successfully prioritizes paying us as little as possible”](#)”
 - This article mentions a documentary called [The Gig is Up](#) by Canadian director, Shannon Walsh, about the rise of algorithmic management.

Nov 10/11 – Tutorial 8

Week 10: The Future of AI (and Ethics)

Readings:

- *AI Ethics*, Ch 4;
- Rini “[Raising good robots](#),” *Aeon*

Nov 17/18 – Tutorial 9 – **Reading Reflection #4** due

Week 11: The Future of AI (and Consciousness)

Readings:

- Susan Schneider, “How to Catch an AI Zombie” from *Artificial You: AI and the Future of Your Mind*
- Eric Schwitzgebel, ‘[We have greater moral obligations to robots than to humans,](#)’ *Aeon*
- Eric Schwitzgebel and John Basl, ‘[AIs should have the same ethical protections as animals,](#)’ *Aeon*
- Listen to: “[Zombies,](#)” from *Hi-Phi Nation*

Suggested:

- Ch 10-11 of *AI Ethics*
- Terry Bisson, “[They're Made out of Meat,](#)” short story,
- Schwitzgebel & Garza “A Defense of the Rights of artificial Intelligence”
- Joanna Bryson, “Robots Should be Slaves”

Nov 24/25 – Tutorial 10 – *Short Paper #2* due

Week 12: AI and the Climate

Readings:

- *AI Ethics*, Ch 12;
- Dobbe and Whittaker, “[AI and Climate Change: How they’re connected, and what we can do about it,](#)”
- Crawford & Joler, “[Anatomy of an AI System](#)”
- Contessa, “[The Robot Apocalypse is Already Here,](#)”

Dec 1/2 – Tutorial 11– *Philosophy Meme Post #2* due

Classes End December 8 — No New Assignments Can Be Accepted After This Date, Unless Otherwise Noted.

Final Exam During Exam Period (Exact Date and Time TBA)