WESTERN UNIVERSITY DEPARTMENT OF PHILOSOPHY Undergraduate Course Outline 2022-23

PHILOSOP 2037F Philosophy and Artificial Intelligence

Fall Term	Instructor: Michael Randall Barnes
Weekly Asynchronous Lectures, online	Office: WIRB 1176
Weekly Synchronous Tutorials, in person	michael.barnes@uwo.ca
Zoom office hours: Wed, 9:30-11am	(also available by appointment)

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 major the ethical and social implications of this new technology.

TEXTS

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

+ Reserve readings as assigned, posted on OWL.

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.

METHOD OF EVALUATION

This course uses an *achievement-based* approach to grading that focuses on satisfactory completion of assignments rather than the degree of assignment quality. 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 be given 3 tokens at the beginning of the semester, which you can exchange for an opportunity to revise and resubmit an assignment (you must email me to use a token). And you can acquire more tokens by submitting work that significantly exceeds the standards specified in the assignment.

Your final grade is determined by which 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.

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

Evaluation Scheme						
	Superior	Satisfactory	Needs Improvement	Unsatisfactory		
Evaluation	Exceeds assignment	Meets assignment	Does not meet one	Does not meet		
	standards	standards	or more assignment	standards and		
			standards	indicates a lack of		
				engagement with		
				the course		
Corresponding	Gain 1 Token for	N/A	Can resubmit by	Can resubmit by		
Token Policy	each Superior		handing in 1 Token	handing in 2		
	assignment			Tokens		
In general, the feedback you receive on assignments will be corrective. 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.						

COURSE ASSIGNMENTS

- An Introductory Writing Assignment (approx. 500 words) (~5%)
- 3–4 Bi-weekly Reflections (approx. 400 words) (~5% each)
- 1–2 short papers (approx. 1,000 words each) (~20% each; or ~40% if only completing one)
- 0–2 Philosophy Meme Posts (approx. 300 words) (~5% each)
- A Final exam (format: take home, including multiple choice and short answer questions) (~20%)

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

Requirements for an A grade:	Requirements for an B grade:	Requirements for a C or D grade:			
Introductory Assignment	Introductory Assignment	Introductory Assignment			
completed (400 – 500 words)	completed (400 – 500 words)	completed (400 – 500 words)			
4 x Bi-weekly Reflections	4 x Bi-weekly Reflections	3 x Bi-weekly Reflections			
completed (300 – 400 words	completed (300 – 400 words	completed (300 – 400 words			
each)	each)	each)			
Paper 1 completed and	Paper 1 completed and met				
exceeded 'satisfactory'	'satisfactory' expectations				
expectations (i.e., received					
'superior')		Paper 1 or Paper 2 completed			
Paper 2 completed and	Paper 2 completed and met	and met 'satisfactory'			
exceeded 'satisfactory'	'satisfactory' expectations	expectations			
expectations (i.e., received					
'superior')					
2 x Philosophy Meme Posts	1 x Philosophy Meme Posts	N/A			
completed (300-400 words	completed (300-400 words				
each)	each)				
80 points or higher on Final	70 points or higher on Final	60 points or higher on Final			
Exam	Exam	Exam (lower than 50 will result			
		in a D grade)			
NOTE: Students <i>must</i> turn in their Introductory Reflection and at least 2 Bi-weekly Reflections by					

NOTE: Students *must* turn in their Introductory Reflection and at least 2 Bi-weekly Reflections by October 28th (the Friday before Fall Reading Week)

Failure to satisfy D-level standards will result in an F.

"+'s" & "-'s": If you earn 15 points *higher* on the final exam than the minimum needed to earn the term grade you are otherwise qualified to earn, you will earn a plus on your term letter grade. If you earn 15 points *lower* on the final exam than the minimum needed to earn the term grade you are otherwise qualified to earn, you will earn a minus on your term letter grade.

Example: If you satisfactorily completed both of your paper, have completed 4 or more of 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 semester grade will be a B+.

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 me to (1) notify me that you plan to use your tokens and (2) propose a new deadline for when your new version is due. You will then have an opportunity to revise your submission and have it reevaluated. If it is Satisfactory, it will count as complete. 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. For this reason, I have designed my late policy to reflect these facts. In general, I will grant extensions without penalty as long as they are requested 3 or more days prior to the due date. Extension requested less than 3 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.

When you request an extension, you must propose a new due date for the assignment based on when you think you can have it completed by. As long as the due date is reasonable, I 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 3+ days prior to the deadline	-	st 2 or fewer the deadline	When requested after the deadline		

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 <u>http://uwo.ca/philosophy/undergraduate/policies.html</u>.

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.

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.

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.

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 <u>http://www.registrar.uwo.ca</u> Student Support Services <u>https://student.uwo.ca/psp/heprdweb/?cmd=login</u> Services provided by the USC <u>http://westernusc.ca/services/</u> Student Development Centre <u>http://www.sdc.uwo.ca/</u> Students who are in emotional/mental distress should refer to Mental Health@Western <u>http://www.uwo.ca/uwocom/mentalhealth/</u> 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

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 "<u>When machines outsmart humans</u>,"

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, "<u>Why GPT-3 is the best and worst of AI right now</u>," *MIT Technology Review*
- Samuel "AI's Islamophobia Problem," Vox
 - (And listen to: *Recode Daily*, "AI's Anti-Muslim bias problem" *Recode*. Oct 4, 2021);
- Harris, "<u>How technology hijacks people's minds</u>,"

Sept 22/23 – Tutorial 2 – *Introductory Writing Assignment* due

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

Readings:

- Nguyen, "Escape the Echo Chamber," Aeon
- Odell, "<u>How To Do Nothing</u>,"
- Owens, "The Age of Post-Authenticity and the Ironic Truths of Meme Culture,"

Sept 29/30 – Tutorial 3 – Bi-Weekly Reflection #1 due

Week 5: Social Media and Ethics

Readings:

- Lynch, "The Outrage Factory (on OWL);
- Bloom and Jordan, "Are we all harmless torturers now?" New York Times
- Tufecki, "It's the Democracy Poisoning Age of a Free Speech," Wired

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

Week 6: Data, Privacy, and Power

Readings:

- AI Ethics, Ch 7;
- Véliz, "<u>Privacy is Power</u>," *Aeon*

Oct 13/14 – Tutorial 5 – *Bi-Weekly Reflection #2* due

Week 7: AI and Equality

Readings:

- Pasquale, *The Black Box Society*, Ch 2. (on OWL);
- Kirchner and Goldstein, "Access Denied: Faulty Automated Background Checks Freeze Out Renters"

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" (on OWL);
- Basu, "The Specter of Normative Conflict: Does Fairness Require Inaccuracy" (on OWL)

Suggested:

- Angwin et al., "<u>Machine Bias</u>," *ProPublica*,
- Listen to: <u>Risky Business</u> from the philosophy podcast *Hi-Phi Nation*

Oct 27/28 – Tutorial 7 – Bi-Weekly Reflection #3 due

READING WEEK: Your Introductory Writing Assignment, Paper 1, at least two Bi-Weekly Reflections *MUST* be turned by the Friday before Reading Week

Week 9: AI and Labour

Readings:

- *AI Ethics*, Ch 9, pt. 2;
- Walsh, "<u>Will robots bring about the end of work</u>?"
- Taylor, "The Automation Charade," Logic Mag
- Watch: Aaron Bastani, "Fully Automated Luxury Communism" [short video]

Suggested:

- Listen to: AI in Hiring mini-series from *In Machines We Trust*, by *MIT Technology Review*.
 - o "<u>Hired by an Algorithm</u>,"
 - "Want a job? The AI will see you now,"
 - o "<u>Playing the AI job market</u>,"
 - o "Beating the AI hiring machines,"
- Jones, "Artificial intelligence quietly relies on workers earning \$2 per hour,"
- <u>Humans Need Not Apply</u>' (a short video summarizing the inevitability of automation)
- <u>The Rise of the Machines</u>' (another one)
- Dragicevic, "<u>Our boss is an algorithm who successfully prioritizes paying us as little as possible</u>." This article mentions a new documentary called <u>'The Gig is Up</u>' by Canadian director, Shannon Walsh, about the rise of 'algorithmic management'.

Nov 10/11 – Tutorial 8 – *Philosophy Meme Post #2* due

Week 10: The Future of AI (and Ethics)

Readings:

- AI Ethics, Ch 4;
- Rini "<u>Raising good robots</u>," *Aeon*

Nov 17/18 – Tutorial 9 – Guest Lecture – Bi-Weekly Reflection #4 due

Week 11: The Future of AI: Thinking Practically

Readings:

- Susan Schneider, 'How to Catch an AI Zombie' (excerpt from Artificial You: AI and the Future of Your Mind), (on OWL)
- 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
- *Hi-Phi Nation* podcast, "Zombies."

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" (on OWL)
- Joanna Bryson, "Robots Should be Slaves" (on OWL)

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

Week 12: AI and the Climate

Readings:

- *AI Ethics*, Ch 12;
- Dobbe and Whittaker, "<u>AI and Climate Change: How they're connected, and what we can do</u> about it,"
- Crawford & Joler, "<u>Anatomy of an AI System</u>"
- Contessa, "The Robot Apocalypse is Already Here,"

Dec 1/2 – Tutorial 11 – Last Class – Review and Recap

Classes End December 8 — No Assignments Can Be Accepted After This Date

Final Exam (Take-home exam opening and closing dates TBA)