

PHILOSOPHY 340: MINDS AND MACHINES (FALL 2024)
Professor Eric Swanson

This course will discuss minds, machines, the relationships between them, and the relationships they encourage and discourage. Throughout we will compare human minds and brains to machine ‘minds’ and ‘brains,’ considering questions like: Could a machine have a mind? Could a machine be conscious, or think in the ways that people do? What can human brains teach us about how a thinking machine might work, and vice versa? What are the ethical ramifications of artificial intelligence, big data, and gargantuan networks, especially when the underlying mechanics of machine and network reasoning are not transparent to us?

COURSE WEB SITES

Canvas (<https://umich.instructure.com/courses/711645>) for lecture; separate Canvas sites for each individual section. Try <https://documentation.its.umich.edu/node/396> for help with Canvas.

KEEPING IN TOUCH

Use **Piazza** (on the **lecture’s Canvas site**) to ask questions that aren’t specific to you! This helps everyone, especially because in this course we all have different strengths and areas of expertise. Use a private post on Piazza, addressed to both Professor Swanson and your GSI, for questions specific to you.

Professor Swanson’s open office hours are 12–2 on Wednesdays, on Zoom. Just drop in! You don’t need to make an appointment: <https://zoom.us/my/e.swanson>. He’s also happy to chat after lecture, and to meet in person at other times by appointment.

BUY OR BORROW

Moral AI and How We Get There, by **Jana Schaich Borg**, **Walter Sinnott-Armstrong**, and **Vincent Conitzer**. This book is available in ebook and audio editions. Readings are from this book unless otherwise specified. (At least almost all other readings and viewings will be posted on Canvas; details to come.)

LECTURE

Mondays and Wednesdays, 10-11:18, **2500 SKB**. Please attend lecture in person if you’re healthy and able. Otherwise, feel free to watch on **Lecture Capture**, but be sure to keep up!

DISCUSSION SECTIONS (SUBJECT TO SMALL CHANGES; PAY ATTENTION TO ANNOUNCEMENTS!)

- 002: Fridays 9–10 with Justin Peterson, in **1028 DANA**
- 003: Fridays 1–2 with Sophia Wushanley, in **2070 SKB**
- 004: Fridays 2–3 with Sophia Wushanley, in **3353 MH**
- 005: Fridays 10–11 with Christopher Feng, in **B3560 BUS / BLAU3560**
- 006: Thursdays 3–4 with Yixuan Wu, in **2200 SKB**
- 007: Thursdays 4–5 with Yixuan Wu, in **2060 SKB**
- 008: Wednesdays 4–5 with Justin Peterson, in **3242 LSA**
- 009: Fridays 1–2 with Christopher Feng, in **1636 CHEM**
- 010: Wednesdays 2–3 with Gabrielle Kerbel, in **4128 LSA**
- 011: Wednesdays 3–4 with Gabrielle Kerbel, in **2022 STB**

GRADING

Your GSI is experienced and well-educated. They are the authority on your performance in this course.

Submit assignments on your section's Canvas site.

4%: self-introduction, due on your section's Canvas site by 3:30 pm on Tuesday September 3 (or a week after you add the course). Your GSI will provide details in section and on your section's Canvas site.

6%: your six highest scores on reflections on one of the week's readings or viewings, due on your section's Canvas site by 3:30 pm Tuesday. Possible grades: 100% / 90% / 80% / 0%. For an 80% your reflection must show that you did the reading or viewing and thought about it. For a 90% your reflection must do the foregoing and provide clear, well-written analysis of and engagement with the reading or viewing. For a 100% your reflection must do the foregoing and be insightful and compelling, and must demonstrate a deep understanding of the issues raised by the reading or viewing.

20%: participation (especially in section and on Piazza; also in lecture and office hours).

10%: your ten highest scores on short quizzes (given periodically in lecture and section; no makeups, no laptops, phones, etc.)

20% each: in lecture exams on Wednesday, October 9 and Wednesday, November 20.

The use of laptops, phones, etc. is forbidden during quizzes and exams.

20%: 600-900 word paper, due on your section's Canvas site by 3:30 pm on Friday, December 13.

The paper will be graded according to this standard: <https://lsa.umich.edu/philosophy/graduates/support/gsis/teaching-resources/additional-materials.html>

Unexcused lateness on papers will result in a 10 point deduction for each day late. Whether lateness is unexcused is wholly at the teaching staff's discretion. Don't let the perfect be the enemy of the good.

Missed exams can be made up *only* with appropriate documentation—for medical reasons, a signed and dated doctor's note; for the death of a loved one, a copy of a death certificate; etc.

Professor Swanson handles all regrading. To regrade fairly he will need to read *all* of your assignments and may change your grade or raise academic integrity questions about *any* of those assignments. He is also happy to provide further detailed feedback without regrading.

Percentages are converted to letter grades using to this function:

Percentage (%)	Letter Grade
96.67–100.00	A+
93.33–96.66	A
90.00–93.32	A-
86.67–89.99	B+
83.33–86.66	B
80.00–83.32	B-
76.67–79.99	C+
73.33–76.66	C
70.00–73.32	C-
66.67–69.99	D+
63.33–66.66	D
60.00–63.32	D-
<60.00	E

EXPECTATIONS

Things may change. It is your responsibility to pay attention to lecture, section, and Canvas announcements.

Keep up with the readings and viewings, and do them *before* lecture. They demand careful, patient thought and attention. If you fall behind you'll miss much of what's going on for the rest of the semester.

We'll be discussing controversial issues in this course, and challenging our beliefs throughout. Be polite, respectful, and generous in discussion with your classmates and teachers.

We expect all students to understand the College of LSA's standards of academic integrity:

<https://lsa.umich.edu/lsa/academics/academic-integrity.html>
<https://guides.lib.umich.edu/academicintegrity>

Contact your GSI if you don't understand them fully! We encourage you to discuss the material with your classmates, but all work you turn in must be your own. A finding of cheating or plagiarism will result in a grade of 0 for that assignment and disciplinary action by the University.

If you are considering using of a large language model (like ChatGPT, Claude, Falcon, Gemini, GPT-n, Llama, . . .), please know that students who do so regularly get bad grades even if they are not accused or found guilty of academic integrity violations.

If you might need an accommodation for a disability, let us know right away. Some aspects of this course may be modified to facilitate your participation and progress. The Office of Services for Students with Disabilities (734-763-3000; ssd.umich.edu) typically recommends accommodation through a Verified Individualized Services and Accommodations form.

Use of laptops in class can distract the user, other students, and teachers. Lots of research has shown that many students learn better if they take notes by hand. See, for example:

<http://www.scientificamerican.com/article/a-learning-secret-don-t-take-notes-with-a-laptop/>

However, some students absolutely have to use laptops, and do benefit from them. If you need to use a laptop in lecture, please sit to the left (as you face the front of the room). If laptops distract you, please sit in the center or on the right. No phones, texting, etc. in class.

So you can all pay attention to all of lecture, we will finish at 11:18. Please be fully present for our discussion until 11:18.

University of Michigan is committed to advancing the mental health and wellbeing of its students. If you or someone you know is feeling overwhelmed, depressed, and/or in need of support, services are available. For help, contact Counseling and Psychological Services (CAPS) at (734) 764-8312 and <https://caps.umich.edu/> any time, or through its counselors physically located in schools on both North and Central Campus. You may also consult University Health Service (UHS) at (734) 764-8320 and <https://uhs.umich.edu/mentalhealthsvcs>.

SCHEDULE OF READINGS, VIEWINGS, LECTURES, AND COURSE-WIDE ASSIGNMENTS

Mon., Aug. 26	Organizational meeting
Wed., Aug. 28	Read before lecture: Preface and Introduction (“What’s the Problem?”) of <i>Moral AI</i> (11 pages)
Tue., Sep. 3	Due on your section’s Canvas site by 3:30 pm (or a week after you add the course): Self-introduction
Wed., Sep. 4	Watch before lecture: Black Mirror, “Be Right Back” (49 minutes)
Mon., Sep. 9	Read before lecture: Chapter 1 of <i>Moral AI</i> : “What Is AI?” (38 pages)
Wed., Sep. 11	Read before lecture: Gary Marcus, “This One Important Fact About Current AI Explains Almost Everything” (≈ 7 pages)
Mon., Sep. 16	Read (or listen) before lecture: Alison Gopnik interview by Ezra Klein (≈ 33 pages / 61 minutes)
Wed., Sep. 18	Read before lecture: Ted Chiang, “Catching Crumbs from the Table” (1 page)
Mon., Sep. 23	Watch before lecture: <i>Her</i> , written and directed by Spike Jonze (126 minutes)
Wed., Sep. 25	Read before lecture: H. M. Collins, “Four Kinds of Knowledge, Two (or Maybe Three) Kinds of Embodiment, and the Question of Artificial Intelligence” (17 pages)
Mon., Sep. 30	Read before lecture: Chapter 2 of <i>Moral AI</i> : “Can AI Be Safe?” (38 pages)
Wed., Oct. 2	Read before lecture: Johanna Thoma, “How Should Artificial Agents Make Risky Choices on Our Behalf?” (≈ 5 pages)
Mon., Oct. 7	Bring your exam prep questions. Catch up if necessary, exam 1 review
Wed., Oct. 9	Exam 1 in lecture. No sections this week, but we may have screenings of “Joan Is Awful.”
Wed., Oct. 16	Read before lecture: Chapter 3 of <i>Moral AI</i> : “Can AI Respect Privacy?” (31 pages)
Mon., Oct. 21	Watch before lecture: Black Mirror, “Joan Is Awful” (56 minutes)
Wed., Oct. 23	Read before lecture: Chapter 4 of <i>Moral AI</i> : “Can AI Be Fair?” (28 pages)
Mon., Oct. 28	Read before lecture: Chapter 5 of <i>Moral AI</i> : “Can AI (or Its Creators or Users) Be Responsible?” (26 pages)
Wed., Oct. 30	Read before lecture: Chapter 6 of <i>Moral AI</i> : “Can AI Incorporate Human Morality?” (25 pages)
Mon., Nov. 4	Watch before lecture: <i>The Matrix</i> , written and directed by Lilly and Lana Wachowski (136 minutes)
Wed., Nov. 6	Read before lecture: Ruha Benjamin, “Default Discrimination” (16 pages)
Mon., Nov. 11	Read before lecture: Chapter 7 of <i>Moral AI</i> : “What Can We Do?” (44 pages)
Wed., Nov. 13	Read before lecture: Conclusion of <i>Moral AI</i> : “It’s Up to Us” (6 pages)
Mon., Nov. 18	Bring your exam prep questions. Catch up if necessary, exam 2 review
Wed., Nov. 20	Exam 2 in lecture. No sections this week.
Mon., Nov. 25	Bring your other questions. (AMA.) No sections this week.
Mon., Dec. 2	Read before lecture: Thomas Nagel, “What Is It Like to Be a Bat?” (16 pages) and Kathleen Atkins, “A Bat Without Qualities” (15 pages)
Wed., Dec. 4	Read before lecture: Rodney Brooks, “What Is It Like to Be a Robot?” (≈ 25 pages)
Mon., Dec. 9	Watch before lecture: Black Mirror, “Hang the DJ” (51 minutes)
Fri., Dec. 13	Due on your section’s Canvas site by 3:30 pm: 600-900 word paper. Stick to the prompt!