

Fall 2023

STS-201 (005-009): Understanding Technological Society

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STS-201 UNDERSTANDING TECHNOLOGICAL SOCIETY



Section 005

KUPF 108

Wed / Fri 1 - 2:20 pm

Section 009

KUPF 208

Tues / Fri 2:30 - 3:50 pm

Dr. Adam See

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328 Cullimore (by appointment)

What influence does ubiquitous tool-use have on minds, beliefs, institutions, societies, and moral behavior? What is the relationship between technology and human nature? How does tool-use “rewire” our brains? How does artificial intelligence affect democracy, the workplace, and the criminal justice system? What does “natural” mean, and can it be replicated? Can artificial intelligence have genuine moral agency? This course asks philosophical, scientific, and sociopolitical questions pertaining to the relationship of technology and human behavior. Readings are drawn from philosophy, cognitive science, ethics, political and environmental theory, and the study of artificial intelligence.

GRADE BREAKDOWN

40%	PIAZZA POST RECORDS
15%	QUIZZES
15%	IN CLASS PARTICIPATION
15%	MIDTERM
15%	FINAL EXAM

This course has no required texts.

All readings and media are linked on this syllabus.

Recommended: order a physical copy of *The Shallows*. It only costs about 3 dollars online.

MIDTERM

This class has one in-class midterm. The format will be mostly short-answer.

IN-CLASS PARTICIPATION

Students who are never absent and who speak up often with questions and comments will receive a perfect participation grade. I will update participation grades a few times throughout the semester.

Missing Class: If you need to miss class for any reason, you must contact the Office of the Dean of Students for an **excused absence**. Your absence will be validated once I receive an email from the Dean of Students.

QUIZZES

Expect occasional pop-quizzes (usually one a week). Each quiz contains only one or two questions, designed to be answered in a couple sentences within a 5-7 minute window (you should only need 1-2 minutes, or less than a minute). The entire purpose of these quizzes is to test basic reading comprehension, *i.e.*, are you actually doing the readings? As such, they are designed to be very easy and obvious to those familiar with the text. **Note:** if you are late for class and miss the quiz, your grade will be zero.

PIAZZA PARTICIPATION (sign up here [\[009\]](#) or [\[005\]](#))

Discussion boards are the most important feature of our class. Each student must make **at least three** substantive posts for each forum exercise (submitted via **Piazza**). Since the purpose of this exercise is back-and-forth dialogue, posts should be spread out throughout the week. This course has **3** forum exercises. Take them seriously!

Forum Expectations

- You must make **at least three substantive posts** within a seven day period. To receive a high grade, these posts should be somewhat spread out over the week.
- **At least one** post must be **uploaded within three days of the beginning of each lesson** to encourage/facilitate participation.
- **At least two** of these posts **must be substantive replies** to others.
- Your major posts (but not necessarily all of your posts) must be **informed by content from our class readings**.

What is a Substantive Post?

Substantive responses do not have a word limit, but should be generally 250-500 words or longer. It is very difficult to say anything substantive in less space than that. Use your judgment. These forums are also intended to be big conversations so chat away naturally too! Occasional short responses are strongly encouraged. The tone should always be conversational.

The ultimate point of our forums is to evaluate you on your argumentative skills. If someone says something you disagree with, *respond to them*, get in there! And, if you get responded to, don't just reply like "oh yeah, my bad" -- no, *defend yourself*, or *change your mind*. Regardless of how you approach the forum, I want to see you anticipate strong counter-arguments to your own ideas. And, definitely, I need you to demonstrate familiarity with the assigned material.

How to Start a Great Thread

In Piazza, **always use the “Note” format** rather than the “Question” format.

Your posts are meant to demonstrate that you **(1)** have done the reading, **(2)** have thought closely about some *particular* aspect of the text, and **(3)** that you are willing to discuss the course content with your classmates.

Never just summarize!

I want you to critically analyze the text and engage with the ideas. For inspiration, here's an idea derived from Edward J. Gallagher. One can look at works of philosophy and/or science as if one has “four eyes”. Each eye reveals a different perspective, and each one taps into a different level of your own thinking and requires the practice of a different skill. The **“four eyes”** are...

(1) Hypothesize: ask a detailed question and formulate a hypothesis about some element of the reading. Then, hypothesize potential *competing* answers to that question.

(2) Analyze: pick one portion of the text that confuses you and dive deep. What's really going on here? What does this concept really mean? What is the true foundation of this argument?

(3) Synthesize: relate a particular part of this reading to something else we read this semester. Could one idea from somewhere else be *productively* combined with one from this reading?

(4) Criticize: what did you like or not like about a particular part of the reading? Did particular arguments strike you as bad? Why? Create a hypothetical dialogue with a figure from the text.

How to Structure Counter-Argumentation

- 1) Author X defends idea P in the following way...
- 2) I disagree with X; P is a weak argument due to the following reasons...
- 3) The strongest way that author X might *respond to my criticisms* is as follows...
- 4) Author X's counter-argument would be strong/weak because...

OR:

- 1) Author X presents argument P in defense of her ideas
- 2) I find argument P convincing, however it still faces the following issues...
- 3) The best way that author X might *respond to my criticisms* as follows...
- 4) Author X's counter-argument would be strong/weak because...

Essentially, think of counter-argumentation in this class as a **dialogue** where you engage in a concise ‘back-and-forth’ with the author/philosopher of the reading. The more engaging the dialogue, the higher your grade will likely be. As a rule of thumb: the stronger you present your opponents arguments, the stronger your *own* position will come across. **High scores are given to students whose responses are nuanced**, *i.e.*, partially critical of *all* sides, including of the strength of one’s *own* positions. Be humble!

Citation Format

Every homework assignment and forum post must be professionally cited. For resources cited in the lesson lecture or reading material, the author name in parentheses is sufficient, with page numbers where appropriate. For instance, your essay might read:

Turing said that the question “can machines think?” was “too meaningless to deserve discussion.” (Winner, 4)

Uploading Your Post Record

After you have completed your participation, copy and paste **all** of your posts from that week (even small ones) into a single document and upload it to the weekly assignment on Canvas with TurnItIn.

To easily collect your posts, **simply search for your own name** in the Piazza search field. Only copy and paste the posts relevant to the current lesson. **Each copied post must have a date and time visible**. Find the time-stamp by hovering your cursor over the section of each post where it says how long ago the post was made.

You can use Canvas to update / resubmit your post record if you decide to post more.

Final grades are calculated on the following scale

- | | |
|---------------------------|-----------|
| • A (90% of total points) | • C (70%) |
| • B+ (87%) | • D (50%) |
| • B (80%) | • F (49%) |
| • C+ (77%) | |

Grading Policy

Your writing assignments will often be expressions of your own thoughts and beliefs on ethical issues. So I want to be clear that your grade will not depend on whether I agree with you. You are encouraged to think independently and to bring your own values and interests to our discussions. If you disagree with the views being presented or discussed in lecture and readings, you are *encouraged* to respectfully explain why by providing clear reasons and arguments. The grading rubric for this course is designed to be as objective as possible.

Many students struggle with abstract writing assignments, and many students do not have English as their first language. So I also want to be clear that your writing will not be graded on grammar or spelling, unless it makes your writing incomprehensible. The point of this course is not to write the perfect essay or perform extensive high level research. The goal of the course is to introduce you to pressing ethical issues and to provide you with various opportunities for thoughtful philosophical reflection on your *own* prior beliefs.

For this reason, your grade will largely depend on my impression of how seriously you have engaged with the course material in a thoughtful discussion of the issues. Substantive, thoughtful homework will be given more credit than half-baked or last minute homework that are transparent attempts to meet the minimum word count. To do well in class you need to demonstrate that you are thinking critically about the issues, and that you're taking the time to express your thoughts carefully.

Students are expected to attend all lectures, complete all assigned readings, and be active participants in discussions. As this is a philosophy class, much of our time together will be interactive. Missing class weighs *heavily* on your participation grade. Just as regular absences will weigh heavily on a student's final grade, regular and/or provocative contributions to discussion will also be strongly considered as I tally grades at the end of the semester.

Late Policy: Students who fail to hand in an assignment will receive a zero on the assignment. Students who fail to show up for a midterm will fail that exam. **Night-before or day-of excuses are almost never acceptable.** The only excuses that I will accept are those **accompanied by a doctor's note.** Otherwise, late work will be deducted a half-point each day.

Plagiarism: Suspected cases of plagiarism will be given **zero credit** for the assignment and **reported to the Dean** as a violation of the Student Code of Academic Integrity, which carries a maximum penalty of expulsion. Copying and pasting from the web is one form of plagiarism. Failing to provide adequate citations is also a form of plagiarism. Any work you use should be given adequate citation. If you use **any** resource in your research (including dictionaries, encyclopedias, and translation tools!), **even if you don't quote it directly**, provide a citation.

ANY EVIDENCE OF AI WRITTEN WORK (INCLUDING GRAMMARLY) WILL EARN A ZERO.

GRADING RUBRIC (Post Records)

1. OUTPUT / COMMUNITY

3+ (Bonus Points)	2 (Full Points / Great work)	1 (Default Grade)	0.5 / 0
5+ substantive posts You're a <i>serious presence</i> on the forums, but not in a point-grabbing kind of way. Your posts are numerous, spread out, and convey genuine interest in the course-content and our online community. Sometimes you function as an intermediary who clarifies or resolves issues that other students are struggling with.	~4 substantive posts Your posts are somewhat spread out over the week. Attempts are genuinely made to reply to those who reply to you. You do not simply agree with others. You either (1) disagree with them, (2) reveal a potential flaw in their argument, or (3) agree with them, but with qualifications, or with a new point of your own.	3 substantive posts Your overall output is satisfactory, but feels somewhat rushed in terms of length and content, usually posted all in one session. At least one post is uploaded within three days of the start of the lesson.	Beneath expectations

2. CLOSE READING / ASSIGNED MATERIALS

4 (Exemplary)	3 (Close & Focused)	2 (Surface-level Reading)	1
The text is analyzed with the "FOUR EYES" method (see syllabus). You demonstrate intellectual humility in the face of challenging material. You raise--and are not afraid to respond to--incisive questions about difficult concepts / arguments.	There is a clear sense of your mind working through hard problems derived from the text. Key terms are defined. Connections are drawn to previous readings.	Posts are either (1) not closely related to the readings, or (2) focus too much on merely summarizing the content.	Beneath Expectations

3. CREATIVITY / CONTENT / CARE

4 (Exemplary)	3 (Original & Personal)	2 (Surface-level Analysis)	1
<p>Your posts are a real pleasure to read. They are original, creative, and entertaining, e.g., perhaps you construct a ridiculous yet insightful thought experiment.</p> <p>The strongest possible counter-arguments are constructed and considered.</p>	<p>You make an attempt to say something new or insightful about the text. Perhaps you evoke your own experiences.</p> <p>You start your own threads, do research, and aim to be a nuanced thinker by considering counter-arguments to your own views.</p>	<p>Posts are satisfactory in terms of content, but generally adopt an uncritical or non-nuanced perspective on the subject.</p> <p>Little-to-no attempt is made to entertain countervailing perspectives or to provide creative counter-arguments of your own design.</p>	Beneath Expectations

Total: 10 pts (w/ option for +2 bonus)

Student Learning Outcomes

By the end of the course, students will be able to:

- Identify ethical issues pertaining to advancements in artificial intelligence.
- Understand key concepts in neuroscience, biology, and philosophy of mind.
- Develop and defend positions on wide-range of topics, from the philosophy of technology, to the climate crisis, the nature of democracy, robotics, animal ethics, sustainability, and globalization.
- Evaluate the broader societal and environmental impacts of engineering.
- Describe and apply different ethical decision-making approaches.

SYLLABUS

1 // Technology, Politics, and the Brain

Winner, [“Do Artifacts Have Politics?”](#) (pgs. 121-128 and 134-5)
Nicholas Carr, [The Shallows](#), “The Vital Paths” and “Tools of the Mind” (33-38)
Nicholas Carr, “Tools of the Mind” (38-42)
Nicholas Carr, “The Juggler’s Brain” and 130-2 (‘What exactly was...’)
Media Diet [Assignment](#)

2 // Technology and the Mind (PIAZZA LESSON)

Andy Clark, [What is Extended Mind?](#)
Adam Alter, [Why Our Screens Make Us Less Happy](#) (recommended)
Daniel Dennett, [Where am I?](#) (recommended)
David Chalmers, [Is Your Phone Part of Your Mind?](#) (recommended)

3 // Democracy and Automation

Clay Shirky, [“How Cognitive Surplus will Change the World”](#)
John Dewey, [“Democracy”](#)
Debate: [“Will Automation Crash Democracy?”](#) (first hour)
William Clifford, [“The Ethics of Belief”](#) (only pg. 1-6) (recommended)
Clay Shirky, [“How to Internet Will \(One Day\) Transform Government”](#) (recommended)
Solender, [Bot Army Behind ‘Reopen America’ Push On Social Media](#)
Fishkin, [We Analyzed Every Twitter Account Following Donald Trump](#)

4 // Algorithms, Artificial Intelligence, and Morality

Propublica, [Machine bias in sentencing](#)
Abby Everett Jacques, [“Why The Moral Machine is a Monster”](#)
James Rachels, [“Subjectivism in Ethics”](#)
Allen, et al., [“Prolegomena to any Future Artificial Moral Agent”](#)
[Google “AI Sentience” transcript](#) (recommended)
David Chalmers, [Are Large Language Models Sentient?](#) (recommended)
Awad, et al. [“The Moral Machine Experiment”](#) (recommended)
[The Greater Good - Mind Field](#) (recommended)

MIDTERM (TBD)

5 // Robot Ethics

Bryson, [Robots Should be Slaves](#)
Danaher, [Should Robots Have Rights? Four Perspectives](#)
Star Trek: The Next Generation, “Measure of a Man” (Netflix)
Estrada, [Robot rights: cheap yo!](#) (recommended)

6 // Robots and Human Resemblance (PIAZZA LESSON)

Debate: [Should Robots Resemble Humans?](#)

[Robot at SXSW Says She Wants to Destroy Humans](#) / [We Talked to Sophia](#)

Estrada, [Sophia and her critics](#)

Bryson, [Of By and For the People: The Legal Lacuna of Synthetic Persons](#) (recommended)

7 // Transhumanism and Enhancement Technology (PIAZZA LESSON)

Carl Elliott, [“What’s Wrong with Enhancement Technology?”](#)

Paul Knoepfler, [The Ethical Dilemma of Designer Babies](#) (recommended)

Debate: [Prohibit Genetic Engineered Babies](#) (recommended)

Meghan O’Gieblyn, [God, Human, Animal, Machine](#), “Chapter 3” (85-100, 108-115) [[pdf](#)]

8 // Animals, Personhood, Cloning, and Biofabrication

Singer, [“All Animals are Equal”](#)

Singer, [“Speciesist Bias in A.I.”](#)

Forgacz, [“Leather and Meat without Killing Animals”](#) (TED Talk)

Lori Gruen, “Eating Animals” (Ch. 3 of *Ethics and Animals* [2nd Ed])

[From Science Fiction to Reality: No Kill Meat](#)

[The Science Behind Dog Cloning](#)

9 // Commodity Fetishism, Globalization, & the Ethics of Distance

Hudson and Hudson, [“Removing the Veil”](#) (only pages 413-419)

Lori Gruen, [Ethics and Animals](#) (82-92 [pages from book itself]) (recommended)

10 // The Climate Crisis and Energy Politics

McDonough and Braungart, [Cradle to Cradle \(“Waste Equals Food”\)](#)

David Wallace-Wells, [The Uninhabitable Earth](#) (Selections)

- Required Mini-Chapters: **Heat Death, Hunger, Plagues of Warming**
- Recommended: **Disasters No Longer Natural, Economic Collapse**

[Geoengineering May Be the Answer to Climate Change](#)

