

Soc 166 Society & Technology

Spring 2019 | UC Berkeley

Instructor: Dr. Linus Huang, Continuing Lecturer

Office hours: (drop-in) Wednesdays 3:15-5:15 PM, 487 Barrows

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Final exam: Tuesday, May 14th, 2019, 11:30 AM – 2:30 PM

What will this course be about?

Does technology bring people together, or drive them further apart? Does it empower workers, or threaten to automate their jobs out of existence? Are we being backward and “anti-progress” if we decline to adopt a new technology? To ask these questions is to ask about the relationship between society and technology. Is the relationship “unilateral” in either direction—that is, do technologies of objective necessity impose deterministic impacts on society, or conversely, are technologies always precisely engineered by social groups to achieve specific purposes? Is it some combination of both?

The premise of this course is that we typically think about the relationship between society and technology, whether explicitly or (often) implicitly, in terms of the principle of **technological determinism**—that particular technologies of necessity cause particular social effects. This course then proceeds as a criticism of technologically deterministic accounts of the relationship between society and technology. We will consider what it means (and what it *doesn't* mean) to say that technology is **socially constructed**, and why a socially constructivist as opposed to a deterministic perspective matters for traditional sociological questions of social solidarity, inequality, democracy, and development.

Readings

All course readings are available in PDF format on the bCourses site.

Grading

Your course grade will be determined by:

- Two **take-home midterm exams**, each 35% of the course grade. They will be “short essay” style in nature (further details to be given later).
- An **in-class final exam**, administered during the University’s officially scheduled timeslot for the course, on Tuesday, May 14th, 2019, from 11:30 AM-2:30 PM. The final exam will be cumulative and multiple choice. The final exam is worth 30% of the course grade.

The course grading scale is as follows:

A+	97+	A	93-96	A-	90-92
B+	87-89	B	83-86	B-	80-82
C+	77-79	C	73-76	C-	70-72
D+	67-69	D	63-66	D-	60-62
		F	0-59		

When it comes time to compute overall course grades, I will round to the nearest whole number using standard rounding conventions. It doesn't really matter what the letter grade on the individual assignments are.

There are no other discretionary considerations that will factor into your grade. Furthermore, I do not offer extra credit beyond that which I may build in to the midterm and final exams.

There are no surprises in how I calculate course grades. The GRADES section on bCourses incorporates the weightings above and will accurately keep you apprised of your course progress. During the semester, with a little arithmetic, you can figure out how you need to do on subsequent exams to earn a particular grade.

Academic Honesty & Classroom Conduct

The UC Berkeley Honor Code states that "As a member of the UC Berkeley community, I act with honesty, integrity, and respect for others" (<https://teaching.berkeley.edu/berkeley-honor-code>). I expect you will follow these principles. You may not copy specific text or ideas from others, whether from fellow students, from authors of our readings or other material you find, without specific attribution. To do otherwise is to plagiarize. You may not cheat on any of the exams by bringing in illicit outside material, copying from fellow students, or engaging in other dishonest practices. Violation of these rules will result in an immediate **-0-** on the *entire* assignment in question, plus a report to the Office of Academic Affairs at my discretion.

You may of course discuss the lectures and readings with your fellow students. Forming studying groups on your own is encouraged, especially since there are no discussion sections to accompany this course. If these groups are used to struggle through ideas or debate topics (both are also good uses of class time, by the way!), then the effort expended can be very rewarding. However, if groups are used simply to memorize a classmate's notes by rote, to subsequently recite on exams, **this is effectively another form of plagiarism** as far as I am concerned. I use this specific example because it has popped up in my courses before.

Study group meetings should be suspended during periods where a take-home exam is active. They can begin again after the exam due date has been reached.

Use of laptops, tablets, smartphones, etc. in class. I use my laptop for virtually everything and do not expect students not to utilize the various digital technologies we have at our disposal today. However, if you are texting, Twittering, Facebooking, watching YouTube or Netflix, or some other such thing in class, you are likely distracting others and I will ask you to leave.

Reading/Exam Schedule

All readings for this course are available on bCourses in the READINGS folder of the FILES section.

Readings associated with a date are to be completed prior to the class meeting on that day. It may become necessary to adjust the reading schedule as the semester unfolds. If this happens, I will make the change(s) on bCourses—check the SYLLABUS section online to see the most up-to-date schedule. I will not change this PDF file.

Introduction		
Jan 23-28	Introduction: what is sociological about technology?	<i>No readings.</i>
Jan 30-Feb 4	Introduction: how we misunderstand the relationship between technology and society	<i>Read:</i> <ul style="list-style-type: none"> • Steven Johnson, “The Creative Apocalypse That Wasn’t” <i>The New York Times</i> Aug 19 2015 • Kentaro Toyama, “Technology won’t fix America’s neediest schools. It makes bad education worse.” <i>The Washington Post</i> Jun 4 2015 • Langdon Winner, “Do artifacts have politics?”
Feb 6	Introduction: what do we mean by the “social construction of technology”?	<i>No readings.</i>
A Closer Look at Technological Determinism		
Feb 8-11	Does technology cause social isolation?	<i>Read:</i> Sherry Turkle, <i>Alone Together</i> introduction
Feb 13	Critique of the social isolation thesis	<i>Read:</i> Keith Hampton, Lauren Sessions, Eun Ja Her & Lee Rainie, “Social Isolation and New Technology” pp 1-40
Feb 15-20	Social media and fake news	<i>Read:</i> Robinson Meyer, “The Grim Conclusions of the Largest-Ever Study of Fake News” <i>The Atlantic</i> Mar 8 2018
Feb 22-25	Social media and collective action	<i>Read:</i> <ul style="list-style-type: none"> • Malcolm Gladwell, “Small Change: Why the revolution will not be tweeted” <i>The New Yorker</i> Oct 4 2010 • Zeynep Tufekci, “Leading the Leaderless” ch 3 from <i>Twitter and Tear Gas: The Power and Fragility of Networked Protest</i>
Feb 25	Take-Home Midterm #1 distributed on bCourses Monday, February 25th 2019	

The Social Construction of Technology		
Feb 27-Mar 1	The SCOT perspective	<i>Read:</i> Trevor Pinch & Wiebe Bijker, “The Social Construction of Facts and Artifacts”
Mar 4	How did automobiles win the city in the U.S.? (part 1)	<i>Read:</i> Peter Norton, <i>Fighting Traffic</i> ch 1, 3
Mar 5	Take-Home Midterm #1 due on bCourses Tuesday, March 5th 2019	
Mar 6	How did automobiles win the city in the U.S.? (part 2)	<i>Read:</i> Peter Norton, <i>Fighting Traffic</i> ch 7, 8
Mar 8	How do we make pedestrians safe for self-driving cars?	<i>Read:</i> Peter Norton, “Self-Driving Car Developers Should Put Pedestrians First” <i>Wired</i> Sep 15 2018
Mar 11-15	Why are we skeptical of genetically engineered food?	<i>Read:</i> <ul style="list-style-type: none"> • Brad Plumer, “5 big takeaways from the most thorough review of GMOs yet” <i>Vox</i> May 18 2016 • Mark Lynas, “The Rise and Rise of the Anti-GMO Movement” ch 7 from <i>Seeds of Science: Why we got it so wrong on GMOs</i>
Mar 18-20	Technology and risk	<i>Read:</i> Diane Vaughan, “The Trickle-Down Effect: Policy Decisions, Risky Work, and the <i>Challenger</i> Tragedy”
Mar 20	Why is the technology industry so male?	<i>Read:</i> <ul style="list-style-type: none"> • Sahil Chinoy & Chloe Weiner, “What does a hacker look like?” <i>The Daily Cal</i> Nov 14 2016 http://projects.dailycal.org/cs-gender/ • Nathan Ensmenger, “Making Programming Masculine”
Mar 25-29	SPRING BREAK	
Apr 1	Why is the technology industry so male? (<i>continued</i>)	
Apr 3-5	Does industrial capitalism come at the expense of the environment?	<i>Read:</i> Andrew Jorgenson & Brett Clark, “Are the Economy and the Environment Decoupling? A Comparative International Study, 1960-2005” pp 1-11, 28-33; also look at Figure 1 (p 25) and Figure 2 (p 27)
Apr 5	Take-Home Midterm #2 distributed on bCourses Friday, April 5th 2019	
Apr 8	Technology & automation (part 1)	<i>Read:</i> William Langewiesche, “The Human Factor” <i>Vanity Fair</i> Oct 2014
Apr 10-12	Technology & automation (part 2)	<i>Read:</i> <ul style="list-style-type: none"> • Matthew Yglesias, “The automation myth” <i>Vox</i> Jul 27 2015 • Ezra Klein, “Technology is changing how we live, but it needs to change how we work” <i>Vox</i> (2016)
Apr 13	Take-Home Midterm #2 due on bCourses Saturday, April 13th 2019	

Apr 15-19	Technology & inequality	<p><i>Read:</i></p> <ul style="list-style-type: none"> • Erik Brynjolfsson & Andrew McAfee, “Why workers are losing the war against machines” <i>The Atlantic</i> Oct 26 2011 • Caroline Hanley, “Putting the Bias in Skill-Biased Technological Change” • Tali Kristal & Yinon Cohen, “The causes of rising wage inequality: the race between institutions and technology” pp 187-192, 206-208 (give Figure 4 on p 206 a careful look)
Science and scientific activity		
Apr 22-26	How is science “cultural”?	<i>Read:</i> Thomas Kuhn, <i>The Structure of Scientific Revolutions</i> pp 1-22
Apr 29-May 1	The social context of innovation	<i>Read:</i> Fred Block & Matthew Keller, “Where do innovations come from?”
May 1-3	The commercialization of academic science?	<i>Read:</i> Steven Vallas & Daniel Kleinman, “Contradiction, convergence, and the knowledge economy”
May 6-10	Reading, Recitation and Review (RRR) week	
May 14	Final Exam IN-CLASS Tuesday, May 14th 2019 11:30 AM-2:30 PM	