

## Sociology 166 Society & Technology

Spring 2022 | UC Berkeley

**Instructor:** Professor Linus Huang, Continuing Lecturer

**Office hours:**

- *in-person/drop-in:* Mondays, 3:15-4:15 PM, 488 Social Sciences Building
- *Zoom:* Tuesdays, 1-3 PM; sign up on Google Calendar

**E-mail:** [lbhuang@berkeley.edu](mailto:lbhuang@berkeley.edu)

**Final exam:** online, Tuesday, May 10 2022, 11:30 AM-2:30 PM

**Graduate Student Readers:** David Joseph-Goteiner, Isabel Garcia Valdivia

### Course Overview

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 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 readings for this course will be made available in PDF format on the bCourses site. There are no textbooks or course readers to purchase.

In an effort to keep the amount of required reading contained, I have both (a) made an effort to identify short excerpts from longer articles, chapters, and books to assign; and (b) in some cases assigned a short “third-party” piece that summarizes a longer and/or more difficult reading, instead of the original reading. The readings are designed to give you a basic story. Additional material presented in lecture will be a more in-depth exploration of that story. You will be responsible for both the readings and the additional material presented in lecture.

## Grading

Your course grade will be determined by three components:

**An educational technology survey (10%).** To stimulate discussion for a topic on technology in education, you will write about positive and negative experiences you've had with technology in education—whether technology provided by the school, or technology you have acquired yourself. More information will be provided as the semester progresses.

**Two take-home midterm exams (30% each, 60% total).** These exams will come at roughly the one-third and the two-thirds marks of the semester. Each will be a take-home, “short-answer” (think: 1-2 pages per question) style exam. More information will be provided as the semester progresses.

**A final exam (30%).** The final exam will be 100% multiple choice and cumulative. It will be administered as a bCourses quiz (so you will have to be logged in to bCourses to take it) on Tuesday, May 10<sup>th</sup>, from 11:30 AM-2:30 PM.

The distribution of questions will favor material later in the course that you will not have been tested on yet, but there will be questions covering material from the entire course. A study guide for the final exam will be distributed during the final week of instruction.

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—89.49 rounds down to 89, 89.50 rounds up to 90, etc. It doesn't really matter what the letter grade on the individual assignments are.

There are no other discretionary considerations, nor opportunities to earn extra credit on an individual basis, that will factor into your grade.

There are no surprises in how I calculate course grades. The GRADES section on bCourses will incorporate 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 assignments in order to earn a particular grade.

*Late grade policy:* Work submitted late will be marked down 20% for each 24-hour period the assignment is overdue.

## Disabled Students Program (DSP)

DSP students should have their arrangements made by the third week of instruction. The DSP office will automatically send me a digital copy of your letter, with explanation of your accommodations. It will not be necessary to also provide me with a physical copy of the letter.

## Recommendation Letters

Writing recommendation letters is part of an instructor's job and one which I embrace readily. However, it is difficult for me, and unhelpful to all parties involved, to write letters for students I do not know very well. I can and have exercised the discretion to decline to write letters when I don't know students beyond what grades they've earned in the course. If you anticipate asking me to write a letter, it is in your interest to participate in class discussion, visit me during my office hours, etc., and let me know what your plans and interests are above and beyond course material.

## 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 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 as 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.

## Additional Resources

The University has set up a central online location with links to a variety of resources, both academic and non-academic, that students might need. Go here: One-Click Resources for Undergraduate Resources <https://recalibrate.berkeley.edu/one-click-mode/one-click-resources-undergraduate-students>.

## Reading, Assignment, and Exam Schedule

All readings listed below are required and must be completed prior to the first meeting of the indicated topic. They are all in PDF format in the FILES section of bCourses. Many of the readings (particularly chapters from books and journal articles) are significantly abbreviated excerpts, so make sure to retrieve them from bCourses and not from another source.

---

### Part I: Introduction

#### Topic: What is sociological about technology?

January 19

*No readings.*

#### Topic: How we misunderstand the relationship between technology & society

January 21

*No readings.*

#### Topic: What is meant by the notion that technology is *socially constructed*?

January 24

*No readings.*

---

### Part II: Debates about Technological Determinism

#### Topic: Does technology cause social isolation?

January 26, 28, 31

*Read:*

- Sherry Turkle, *Alone Together* introduction
- Keith Hampton, Lauren Sessions, Eun Ja Her & Lee Rainie, “Social Isolation and New Technology”
- “How Meet Cutes Have Changed in the 21<sup>st</sup> Century” *Slate* Jul 15 2019  
*Note:* This summarizes research by Michael Rosenfeld & Reuben J. Thomas. We will look at findings from Rosenfeld & Thomas’ 2012 article “Searching for a Mate” in lecture.

**Educational technology survey due Friday, Jan 28, 11:59 pm**

**Topic: Does technology improve education?**

February 2, 4, 7

*Read:*

- Should laptops be banned from the lecture hall?
  - “Leave Your Laptops at the Door to My Classroom” *The New York Times* Jan 2 2017 [Darren Rosenblum, Pace Univ.]
  - “Should You Allow Laptops in Class? Here’s What the Latest Study Adds to that Debate” *The Chronicle of Higher Education* Feb 6 2019
  - “Don’t Insult Your Class by Banning Laptops” *The Chronicle of Higher Education* Dec 4 2017 [Matthew Numer, Dalhousie Univ., Nova Scotia]
- The 2009/10 debate about creating an all-online UC campus:
  - “Online Campus Could Solve Many U. of California Problems, a Dean Says” *The Chronicle of Higher Education* Jul 22 2009
  - “Creator of Berkeley’s First On-Line Course Tells All” Remaking the University blog, Aug 11 2010 (Prof. Philip Stark)
  - Prof. Wendy Brown, presentation to Graduate Student Association Forum on the Cyber Campus, Oct 11 2010
- The problems with educational technologies:
  - Ben Fink & Robin Brown (2016), *The Problem with Educational Technology* (Hint: It’s Not the Technology)
  - Justin Reich (2020), *Failure to Disrupt: Why Technology Alone Can’t Transform Education* chapter 1 “Instructor-Guided Learning at Scale”

**Topic: Why has social media driven us apart rather than brought us together? Part I.**

February 9, 11

*Read:*

- Yochai Benkler (2006), *The Wealth of Networks* chapters 6 “The Trouble with Mass Media” and 7 “Emergence of the Networked Public Sphere”
- “False news travels faster and farther on Twitter than the truth” *Vox* Mar 8 2018

**Topic: Why has social media driven us apart rather than brought us together? Part II.**

February 14, 16

*Read:* “Opinion: Facebook serves as an echo chamber, especially for conservatives. Blame its algorithm.” *The Washington Post* Oct 26 2020

**Topic: Does social media activism work?**February 18, 23, 25 (*note:* no class on President’s Day, February 21<sup>st</sup>)*Read:*

- Clay Shirky, *Here Comes Everybody* chapter 1 “It Takes a Village to Find a Phone”
- Malcolm Gladwell, “Small Change: Why the revolution will not be tweeted” *The New Yorker* Oct 4 2010
- Thomas Friedman, “Social Media: Destroyer or Creator?” *The New York Times* Feb 3 2016
- Zeynep Tufekci, *Twitter and Tear Gas* chapter 3 “Leading the Leaderless”

**Midterm #1 distributed on bCourses, Friday, February 25**

---

**Part III: The Social Construction of Technology****Topic: What does it mean that science is “paradigmatic”? Is this good or bad?**

February 28, Mar 2, 4

*Read:* Thomas Kuhn (1962), *The Structure of Scientific Revolutions***Midterm #1 due on bCourses, Tuesday, March 1, 11:59 PM****Topic: Toward a social constructivist perspective on technology**

March 7, 9, 11

*Read:* Trevor Pinch & Wiebe Bijker (1984), “The Social Construction of Facts and Artefacts”**Topic: How did automobiles win the city?**

March 11, 14, 16

*Read:*

- Peter Norton, *Fighting Traffic: The Dawn of the Motor Age in the American City* introduction “What Are Streets For?”
- Andrew Ng, “Self-driving cars are here” Medium May 7 2018
- Peter Norton, “Self-driving car developers should put pedestrians first” *Wired* Sep 15 2018

**Topic: Why are we skeptical of genetically-engineered food?**

March 18

*Read:*

- Greenpeace International, “Seven myths about GM crops, and the truth behind them” Nov 2015
- “5 big takeaways from the most thorough review of GMOs yet” *Vox* May 18 2016
- Mark Lynas, *Seeds of Science: Why we got it so wrong on GMOs* chapter 7 “The Rise and Rise of the Anti-GMO Movement”

**SPRING BREAK: March 21-25****Topic: Why are we skeptical of genetically-engineered food?***(continued from before Spring Break)*

March 28, 30

**Topic: Are we capable of managing high-risk technologies?**

April 1, 4, 6

*Read:*

- Charles Perrow (1984), *Normal Accidents: Living with High-Risk Technologies* excerpts
- Diane Vaughan (1997), “The Trickle-Down Effect: Policy Decisions, Risky Work, and the Challenger Tragedy” *California Management Review* 39(2)

**Topic: Where do technological innovations come from?**

April 8, 11, 13

*Read:*

- “Gordon Crovitz: Who Really Invented the Internet?” *The Wall Street Journal* Jul 22 2012
- “Michael Hiltzik: So, Who Really Did Invent the Internet?” *The Los Angeles Times* Jul 23 2012
- Matt Ridley, “The Myth of Basic Science” *The Wall Street Journal* Oct 23 2015
- Fred Block & Matthew Keller, “Where Do Innovations Come from?” (ITIF Working Paper, July 2008)

**Midterm #2 distributed on bCourses, Friday, April 8****Midterm #2 due on bCourses, Tuesday, April 12, 11:59 PM****Topic: Why is coding so male?**

April 15, 18, 20

*Read:*

- James Damore, “Google’s Ideological Echo Chamber” Jul 2017
- Sahil Chinoy & Chloe Weiner, “What does a hacker look like?” *The Daily Californian* Nov 14 2016 <http://projects.dailycal.org/cs-gender/>
- Clive Thompson, “The Secret History of Women in Coding” *The New York Times Magazine* Feb 13 2019

**Topic: Will artificial intelligence take our jobs?**

April 22, 25, 27, 29

*Read:*

- William Langewiesche, “The Human Factor” *Vanity Fair* Oct 2014
- “Andrew Yang’s Campaign Message: The Robots Are Coming” *The New York Times* Feb 10 2018
- Brookings Institute, “Automation and Artificial Intelligence” Jan 2019 (“Executive Summary” + “Five Policy Strategies for Adjusting to Automation”)
- Ezra Klein, “Technology is changing the way we live, but it needs to change how we work” *Vox* May 25 2016

---

**Reading, Recitation, and Review Week: May 2-6**

---

**SCHEDULE SUBJECT TO MODIFICATION**

**CONSULT BCOURSES FOR MOST CURRENT SCHEDULE**

**Final Exam online, Tuesday, May 10, 2022 11:30 AM-2:30 PM**