Sociology 166 Society & Technology

Spring 2021 | UC Berkeley

Instructor: Dr. Linus Huang, Continuing Lecturer
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Final exam: online, Tuesday, May 11 2020, 3-6 PM
Graduate Student Reader: Skyler Lewis

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.

Logistics for an Online Semester

This course will be entirely online this Spring 2021 semester. Despite this, I intend the course to be given synchronously, as if we were meeting in-person. I will lecture live, over Zoom, on the regular MWF 10:00-11:00 AM schedule. We will observe the "Berkeley time" convention of starting 10 minutes after the hour, so we will actually begin at 10:10 AM on MWF.

Although I don't recommend it, it will be technically possible to take the course **asynchronously**. All lectures will be recorded and posted to bCourses shortly after class ends, where they will remain until the end of the semester. Attendance/participation will not be part of the grade. Of the graded assignments, only the final exam will require online attendance at a specific time, but even there, accommodations can be made for those in different time zones, etc.

But, while asynchronous participation will technically be possible, I recommend synchronous participation in the course. This course will indeed follow a lecture format, as it would have if we had been holding the course in-person, but the Zoom sessions will not be me just playing a pre-recorded lecture. I intend to take full advantage of Zoom's interactive features, including both normal audio/visual interaction, as well as chat.

I will hold weekly office hours on Tuesdays from 1:00-3:00 PM. These will be held over Zoom, but at a separate URL from the lecture (the lectures are of course specific to the course, but my office hours are shared between students in all three of my courses this term). Students can sign up for 15-minute appointments over bCal.

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 grade will be determined by three different components:

- **Three focus papers** (10% each, 30% total), distributed throughout the course, each associated with a specific topic. Each will be either 1- or 2-single-spaced pages, <u>maximum</u>. These are not research papers, but neither are they open-ended response papers: each will have a specific question or issue that the paper should address. Focus papers will be scored by how well they demonstrate serious engagement with the material and how well they address the question asked.

- **Two midterm exams** (25% each, 50% total). Both will be "take-home" (whatever that means during an online semester) in that you will be given 4 days to complete each, rather than having to complete them within a single class session.

- **A final exam** (20%), which will be administered as a bCourses quiz during the University's official exam timeslot for this course: Tuesday, May 11, 2020, 3-6 PM. The exam will be 100% multiple choice. It will cover material from the entire course (i.e., it will be cumulative), but it will emphasize material from the later parts of the course.

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 <u>prior</u> 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

What is sociological about technology?
January 20, 22

No readings.

Understanding the relationship between society and technology
January 25, 27

No readings.

Part II: Debates about Technological Determinism

Topic: Does technology cause social isolation?
January 29, February 1, 3

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 21st 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.

Topic: Does technology improve education?
February 5, 8, 10

Focus Paper #1 due Saturday, February 6, 11:59 PM: How have your experiences with Zoom been? See entry online for more details.

Read:
- Kentaro Toyama, "Technology won't fix America's neediest schools. It makes bad education worse." *The Washington Post* Jun 4 2015
- Ben Fink & Robin Brown, *The Problem with Educational Technology (Hint: It's Not the Technology)*
- Four pieces regarding an effort to create an all-online UC, circa 2009:
  - Christopher Edley Jr., "Building a new UC—virtually" *The Los Angeles Times* Jul 1 2009
  - "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

Topic: Has the Web killed the public sphere?
February 12, 17, 19 (note: no class on February 15, Washington's Birthday)

Read:
- John Perry Barlow, "A Declaration of the Independence of Cyberspace" Feb 8 1996
- Yochai Benkler, *The Wealth of Networks* chapters 6 "The Trouble with Mass Media" and 7 "Emergence of the Networked Public Sphere"
- Ian Bogost, "So Much for the Decentralized Internet" *The Atlantic* Jul 26 2020
- Sinan Aral, "How Lies Spread Online" *The New York Times* Mar 8 2018
  This opinion piece summarizes a study by Aral, Soroush Vosoughi & Deb Roy that appeared in the journal *Science.* We'll take a closer look at the data and argument from the study in lecture.

Topic: Does social media activism work?
February 22, 24, 26

Focus Paper #2 due Thursday, February 25, 11:59 PM: How do we make social media work better for civic engagement? More details to come online.

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 26

Part III: The Social Construction of Technology

Topic: What does it mean that science is "paradigmatic"? Is this good or bad?
March 1, 3, 5

Read: Thomas Kuhn, *The Structure of Scientific Revolutions*
> This topic is not really associated with SCOT. Consider it an interesting interlude between the two major sections of the course.

Midterm #1 due on bCourses, Tuesday, March 2, 11:59 PM

Topic: The Social Construction of Technology (SCOT) Perspective
March 8, 10, 12

Read:
- Trevor Pinch & Wiebe Bijker, "The Social Construction of Facts and Artefacts"
- Nelly Oudshoorn, *The Male Pill* chapter 1 "Designing Technology & Masculinity"

Topic: How did automobiles win the city?
March 15, 17, 19

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

SPRING BREAK: March 22-26

Topic: Why are we skeptical of genetically-engineered food?
March 29, 31, April 2

Read:
- "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"

Midterm #2 distributed on bCourses, Friday, April 2

Topic: Where does technological innovation come from?
April 5, 7, 9

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
- "Eric Schmidt: Silicon Valley Needs the Federal Government" *The New York Times* Feb 27 2020
- Alana Semuels, "Why Does Sweden Have So Many Start-ups?" *The Atlantic* Sep 28 2017

Midterm #2 due on bCourses, Tuesday, April 6, 11:59 PM

Topic: Why is coding so male?
April 12, 14, 16

Read:
- James Damore, "Google's Ideological Echo Chamber" Jul 2017
- Sahil Chinoy & Chloee 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 automation take our jobs?
April 19, 21, 23

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
    This NYT piece is about former Democratic candidate Andrew Yang but was not written by Yang himself. Yang has penned his own NYT pieces and all else being equal I would have preferred to use one of those. But I decided that this third-person-reported piece is just more direct.
- 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

Topic: Is technology the cause of income inequality in the U.S.?
April 26, 28, 30

Focus Paper #3 due Tuesday, April 27, 11:59 PM: How should labor-displacing technologies be introduced? More details to come online.

Read:
- Eric Brynjolfsson & Andrew McAfee, "Why workers are losing the war against the machines" from *Rage Against the Machines*
- Caroline Hanley, "Putting the Bias in Skill-Biased Technological Change"
- Daron Acemoglu & Pascual Restrepo, "The Revolution Need Not Be Automated" Project Syndicate Mar 2019

Reading, Recitation, and Review Week: May 3-7

Final Exam online, Tuesday, May 11 3-6 PM