Sociology 166 Society & Technology

Fall 2017 | UC Berkeley

Instructor: Dr. Linus Huang Office Hours: Wednesdays 2:30-4:00 PM, 487 Barrows E-Mail: lbhuang@berkeley.edu Readers: Ogi Radic, Aja Heisler & Randall Tran Final Exam: Tuesday, December 12, 2017, 8:00-11:00 AM

Course Overview

What is the relationship between technology and society? The prevailing understanding can be summarized within one concept: **technological determinism**. In a nutshell, technological determinism is the belief that technology shapes society. For instance, the emergence of industrial technologies like the steam engine of necessity destroyed feudal social relations and ushered in modern industrial capitalism. The automobile made possible the decentralization of the urban core and the rise of suburbia. The Internet and in particular social media shrink the world into a village. Robots and other automation technologies will vastly increase the amount of time available for labor—but also raises the specter of mass unemployment.

Technological determinism, in practice, can be slippery. It can take many forms. The deterministic link between technology and society may be "harder" in some cases and "softer" in others. The view of the society that technology creates may be utopian (e.g., technology will end disease, famine) or dystopian (e.g., technology enables weapons of mass destruction, eliminates human skill/discretion). In all cases, however, the task of studying technology and society is reduced to the task of studying the (deterministic) ways in which a given technology will transform social structure and action.

A sociological approach to technology disputes the assumptions technological determination makes about the relationship between technology and society. It draws attention to the role that society plays in shaping the way that technologies impact society and even in the shaping of the technology itself, to begin with. In doing so, it asserts that the problem of studying technology and society entails the studying of social relations, and not just the studying of technologies in isolation.

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, December 12th, 2017, from 8:00-11:00 AM. The final exam will be <u>cumulative</u> and <u>multiple choice</u>. The final exam is worth 30% of the course grade.

The course grading scale is as follows:

A+	97+	А	93-96	A-	90-92
B+	87-89	В	83-86	B-	80-82
C+	77-79	С	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 general rule of thumb behind the code is: <u>act in such a way that no one could possibly</u> <u>question your conduct</u>.

Plagiarism—copying someone else's work and presenting it as your own—has been the central problem. Copying off either another student or off the readings (whether the readings are on or outside of the syllabus) both constitute plagiarism. We will use TurnItIn software to detect any instances of plagiarism on submitted assignments. All instances of plagiarism will be punished by an immediate **-0-** on the *entire* assignment in question, plus a report to the Office of Academic Affairs at my discretion.

Forming studying groups on your own is highly 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 recently popped up in one of my courses.

Study group meetings should be suspended while a take-home exam is being taken. 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, watching Netflix, or some other such thing in class, you are likely distracting others and I will ask you to leave.

<u>Reading/Exam Schedule</u>

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 <u>prior</u> to the class meeting on that day. What follows may best be considered a preliminary plan. 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 <u>not</u> change this PDF file.

Aug	23	Wed	Introduction: Technology and social relations
	25	Fri	Introduction: How we misunderstand the relationship between society & technology
	28	Mon	Introduction: The social construction of technology
	30	Wed	(Introduction, cont'd)
Sep	1	Fri	The ideology of <i>PROGRESS</i>
			Readings:
			 M. Shaer, "The False Promise of DNA Testing" <i>The Atlantic</i> Jun 2016 J. Wetmore, "Technology is making us more like the Amish" <i>Slate</i> 24 Dec 2012
	4	Mon	✓ < < LABOR DAY: NO CLASS ► ► ►
	6	Wed	(The ideology of <i>PROGRESS</i> , cont'd)
	8	Fri	Reification
			<i>Reading:</i> K. Toyama, "Technology won't fix America's neediest schools. It makes bad education worse." <i>The Washington Post</i> 4 Jun 2015
	11	Mon	(cont'd)
	13	Wed	Does technology cause social isolation?
			Reading: S. Turkle, alone together introduction
	15	Fri	(cont'd)
	18	Mon	Critique of the social isolation thesis
			<i>Reading:</i> Pew Research Center, "Social Isolation and New Technology" Nov 2009
	20	Wed	(cont'd)

Sep	22	Fri	Media technology and fake news
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Readings:

- S. Maheshwari, "How Fake News Goes Viral: A Case Study" *The New York Times* 20 Nov 2016
- M. Fisher, J.W. Cox & P. Hermann, "Pizzagate: From rumor, to hashtag, to gunfire in D.C." *The Washington Post* 6 Dec 2016
- M. Hachman, "Just how partisan is fake news? We tested it" *PC World* 21 Nov 2016

Midterm #1 Distributed on bCourses Friday, September 22th, 2:00 PM

	25	Mon	(Media technology and fake news, cont'd)
	27	Wed	Social media and collective action
			<i>Reading:</i> Z. Tufekci, "Leading the Leaderless" ch 3 from <i>Twitter and Tear Gas: The Power and Fragility of Networked Protest</i>
	28	Thu	Midterm #1 DUE on bCourses Thursday, September 28 th , 12:00 PM
	29	Fri	(Social media and collective action, cont'd)
Oct	2	Mon	How is science "cultural"?
			Reading: T. Kuhn, The Structure of Scientific Revolutions pp. 1-22
	4	Wed	(cont'd)
	6	Fri	(cont'd)
	9	Mon	The Social Construction of Technology (SCOT) perspective
			Readings:
			• L. Winner, "Do Artifacts Have Politics?"
			• T. Pinch & W. Bijker, "The Social Construction of Facts and Artifacts"
	11	Wed	(cont'd)
	13	Fri	How did automobiles win the city? (Part I)
			Reading: P. Norton, Fighting Traffic ch 1, 3
	16	Mon	How did automobiles win the city? (Part II)
			Reading: P. Norton, Fighting Traffic ch 7, 8
	18	Wed	(cont'd)

Oct 20 Fri Why are we skeptical of GMOs?

Readings:

- B. Plumer, "5 big takeaways from the most thorough review of GMOs yet" *Vox* 18 May 2016
- R. Schurman & W. Munro, "The process of grievance construction in the anti-genetic engineering movement"

23	Mon	(cont'd)
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25 Wed (cont'd)

27 Fri Why are programmers mostly men?

Readings:

- N. Ensmenger, "Making Programming Masculine"
- S. Chinoy & C. Weiner, "What does a hacker look like?" *The Daily Californian* 14 Nov 2016

	30	Mon	(cont'd)
		Midte	rm #2 Distributed on bCourses Monday, October 30 th , 2:00 PM
Nov	1	Wed	Technology and risk
			<i>Reading:</i> D. Vaughan, "The Trickle-Down Effect: Policy Decisions, Risky Work, and the <i>Challenger</i> Tragedy"
	3	Fri	(cont'd)
	5	Sun	Midterm #2 DUE on bCourses Sunday, November 5 th , 12:00 PM
	6	Mon	Does technology make work worse for workers?
			Readings:
			 M. Yglesias, "The automation myth" <i>Vox</i> 27 Jul 2015 E. Klein, "Technology is changing how we live, but it needs to change how we work" (2016)
	8	Wed	(cont'd)
	10	Fri	✓ ✓ ✓ VETERAN'S DAY: NO CLASS ► ► ►
	13	Mon	Technology and inequality
			Readings:
			 E. Brynjolfsson & A. McAfee, "Why workers are losing the war against the machines" <i>The Atlantic</i> 26 Oct 2011 C. Hanley, "Putting the Bias in Skill-Biased Technological Change"
	15	Wed	(cont'd)

Nov	17	Fri	(cont'd)
	20	Mon	The social context of innovation
			Reading: F. Block & M. Keller, "Where Do Innovations Come From?"
	22	Wed	In the second day: NO CLASS
	24	Fri	◄ ◄ THANKSGIVING BREAK: NO CLASS ► ► ►
	27	Mon	(The social context of innovation, cont'd)
	29	Wed	Is academic science becoming corrupted by commercialization?
			<i>Reading:</i> S. Vallas & D.L. Kleinman, "Contradiction, convergence, and the knowledge economy: The confluence of academic and commercial biotechnology"
Dec	1	Fri	(cont'd)
	4	Mon	READING,
	6	Wed	RECITATION, and
	8	Fri	REVIEW
	12	Tue	Final Exam 8:00 AM-11:00 AM