

## Sociology 166 Society &amp; Technology

UC Berkeley | Fall 2016

**Instructor:** Dr. Linus Huang**Office Hours:** Mondays 1:30-3:30, 487 Barrows Hall**Email:** lbhuang@berkeley.edu**Readers:** *To Be Announced***Final Exam:** Friday, December 16<sup>th</sup>, 2016 11:30-2:30 PM**Course Overview**

What is the relationship between technology and society? The prevailing understanding can be summarized by 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 practice.

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 (2) take-home midterm exams**, weighted at 40% of the course grade each (80% between the two of them). They will be distributed on Friday, September 23<sup>rd</sup> and Friday, November 4<sup>th</sup>, respectively, and will be due on Friday, September 30<sup>th</sup> and Monday, November 14<sup>th</sup>, respectively. Each will be short-essay style in nature.

- An **in-class final exam** administered during the University's official timeslot for our course. This will be Friday, December 16<sup>th</sup>, 2016, from 11:30 AM to 2:30 PM. The final exam will be a **cumulative** and will be of **multiple-choice** format. It will be worth 20% of your 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 course grades, I will round to the nearest whole number. It doesn't really matter what your letter grades on the individual exams 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**

Violations of academic honesty have unfortunately been on the rise at UC Berkeley over the past few years, prompting among other things the posting of plaques in general classrooms around campus re-emphasizing the code of academic conduct. The general rule of thumb behind the code is: act in such a way that no one could possibly question your conduct.

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.

### Reading/Exam Schedule

All readings are in PDF format in the READINGS folder in the FILES section of the bCourses site. For readings from periodicals, I give the source, which can be looked up online—but the PDF is still on bCourses, anyway.

Readings associated with a date are to be completed prior 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 not change this PDF file.

Aug	24	Wed	<b>Introduction: technology and social relations</b> No readings.
	26	Fri	<b>Introduction, cont'd: how we misunderstand the relationship between society &amp; technology</b> No readings.
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	29	Mon	<b>Introduction, cont'd: the social construction of technology</b> No readings.
	31	Wed	(Introduction, cont'd) No readings.
Sep	2	Fri	<b>The ideology of PROGRESS</b> <i>Readings:</i> <ul style="list-style-type: none"> <li>• Matthew Shaer, “The False Promise of DNA Testing” <i>The Atlantic</i> June 2016</li> <li>• Jameson Wetmore, “Technology is making us more like the Amish” <i>Slate</i> 24 Dec 2012</li> </ul> <i>Worth checking out, but strictly optional:</i> <ul style="list-style-type: none"> <li>• Leo Marx, “Technology: The emergence of a hazardous concept” <i>Technology and Culture</i> 51(3), July 2010</li> </ul>

- Sarah A. Chrisman, “I love the Victorian era. So I decided to live in it.” *Vox* 9 Sep 2015 URL: <http://www.vox.com/2015/9/9/9275611/victorian-era-life>
- Rebecca Onion, “*Vox*’s Victorians: Does playing dress-up really give you a sense of what the past was like? Of corset it doesn’t.” *Slate* 9 Sep 2015 URL: [http://www.slate.com/articles/life/history/2015/09/vox\\_victorians\\_sarah\\_chrisman\\_s\\_essay\\_on\\_living\\_like\\_a\\_victorian\\_is\\_preposterous.html](http://www.slate.com/articles/life/history/2015/09/vox_victorians_sarah_chrisman_s_essay_on_living_like_a_victorian_is_preposterous.html)

Sep	5	Mon	<b>◀◀◀ LABOR DAY: NO CLASS ▶▶▶</b>
	7	Wed	(The ideology of PROGRESS, cont’d) No new readings.
	9	Fri	<b>Reification</b> <i>Readings:</i> <ul style="list-style-type: none"> <li>• Kentaro Toyama, “Technology won’t fix America’s neediest schools. It only makes bad education worse.” <i>The Washington Post</i> 4 Jun 2015</li> <li>• Mark Warschauer &amp; Morgan Ames, “Can One Laptop Per Child Save the World’s Poor?” <i>Journal of International Affairs</i> 64(1): Fall/Winter 2010</li> </ul>
	12	Mon	(Reification, cont’d) No new readings.
	14	Wed	<b>Reductionism, Part I: Does the digital economy mean the end of the creative industry?</b> <i>Reading:</i> Steven Johnson, “The Creative Apocalypse That Wasn’t” <i>The New York Times</i> 19 Aug 2015
Sep	16	Fri	<b>Reductionism, Part II: Does technology cause social isolation?</b> <i>Readings:</i> <ul style="list-style-type: none"> <li>• Sherry Turkle, <i>alone together</i> introduction</li> <li>• Miller McPherson, Lynn Smith-Lovin &amp; Matthew E. Brashears, “Social Isolation in America: Changes in Core Discussion Networks over Two Decades” <i>American Sociological Review</i> 71(3): 353-375, June 2006</li> </ul>
	19	Mon	(Does technology cause social isolation?, cont’d) No new readings.

Sep 21 Wed (Does technology cause social isolation?, cont'd)  
No new readings.

23 Fri **Critique**  
*Reading:* Pew Internet & American Life Project, “Social Isolation and New Technology” November 2009

**MIDTERM #1 DISTRIBUTED ON BCOURSES FRIDAY, SEPTEMBER 23<sup>RD</sup>**

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26 Mon (Critique, cont'd)  
No new readings.

28 Wed **Reductionism, Part III: Does the Internet make society more democratic?**  
We will be exploring Yochai Benkler’s *The Wealth of Networks*, specifically Chapters 6 & 7. If you are feeling ambitious, then you can plow through these two chapters in addition to working on the exam. But reading them is optional. (Benkler is not too theoretically difficult—but, both of these chapters are densely-packed.)

30 Fri (Does the Internet make society more democratic?, cont'd)  
No new readings.

**MIDTERM #1 DUE ON BCOURSES FRIDAY, SEPTEMBER 30<sup>TH</sup>**

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Oct 3 Mon (Does the Internet make society more democratic?, cont'd)  
No new readings.

5 Wed **Critique**  
*Reading:* Pew Research Center, “Social Media and The ‘Spiral of Silence’”, August 26, 2014

Oct 7 Fri (Critique, cont'd)  
No new readings.

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10 Mon **The SCOT perspective**  
*Readings:*

- Langdon Winner, “Do Artifacts Have Politics?”
- Trevor Pinch & Wiebe Bijker, “The Social Construction of Facts and Artifacts”

12 Wed (The SCOT perspective, cont'd)  
No new readings.

Oct 14 Fri (The SCOT perspective, cont'd)  
No new readings.

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17 Mon **How is science socially constructed?**

*Reading:* Thomas Kuhn, *The Structure of Scientific Revolutions* pp. 1-22

If you find Kuhn a little puzzling at first, I recommend the following (optional) snippets to put yourself into a Kuhn-ian frame of mind.

- Brian Resnick, “Study: Elite scientists can hold back science” *Vox* 15 Dec 2015 URL: <http://www.vox.com/science-and-health/2015/12/15/10219330/elite-scientists-hold-back-progress>
- Philip Ball, “Stop calling the Babylonians Scientists” *The Atlantic* 10 Feb 2016 URL: <http://www.theatlantic.com/science/archive/2016/02/babylonians-scientists/462150/>

19 Wed (How is science socially constructed?, cont'd)  
No new readings.

21 Fri (How is science socially constructed?, cont'd)  
No new readings.

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24 Mon **How did automobiles win the city?, Part I**

*Reading:* Peter Norton, *Fighting Traffic* ch 1, 3

26 Wed **How did automobiles win the city?, Part II**

*Reading:* Peter Norton, *Fighting Traffic* ch 7, 8

28 Fri (How did automobiles win the city?, cont'd)  
No new readings.

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Oct 31 Mon **Why are we skeptical of GMOs?**

*Readings:*

- Brad Plumer, “5 big takeaways from the most thorough review of GMOs yet” *Vox* 18 May 2016 URL: <http://www.vox.com/2016/5/18/11690992/gmos-review-evidence-safety-health>
- Rachel Schurman & William Munro, “Ideas, thinkers, and social networks: The process of grievance construction in the anti-genetic engineering movement” *Theory and Society* 35: 1-38 (2006)

*Worth checking out, but strictly optional:*

- Jacob Bunge & Annie Gasparro, “Organic vs. Non-GMO Labels. Who’s Winning?” *The Wall Street Journal* 8 Dec 2015 URL: <http://www.wsj.com/articles/organic-vs-non-gmo-labels-whos-winning-1449619118>
- Jiri Hulcr, “Who Should Talk About Science?” *Inside Higher Ed* 2 Jun 2016 URL: <https://www.insidehighered.com/views/2016/06/02/universities-need-communicate-much-more-effectively-about-science-essay>
- Nathanael Johnson’s excellent series, “Panic-Free GMOs”, on *Grist* URL: <https://grist.org/series/panic-free-gmos/>

Nov 2 Wed (Why are we skeptical of GMOs, cont’d)  
 No new readings.

4 Fri (Why are we skeptical of GMOs, cont’d)  
 No new readings.

**MIDTERM #2 DISTRIBUTED ON BCOURSES FRIDAY, NOVEMBER 4<sup>TH</sup>**

7 Mon **Technology & work**

*Readings:*

- Matthew Yglesias, “The automation myth” *Vox* 27 Jul 2015 URL: <http://www.vox.com/2015/7/27/9038829/automation-myth>
- Ezra Klein, “Technology is changing how we live, but it needs to change how we work” *Vox* 25 May 2016 URL: <http://www.vox.com/a/new-economy-future/technology-productivity>

9 Wed (Technology & work, cont’d)  
 No new readings.

11 Fri **◀◀◀ VETERAN’S DAY: NO CLASS ▶▶▶**

14 Mon **Technology & inequality**

*Readings:*

- Erik Brynjolfsson & Andrew McAfee, “Why Workers Are Losing the War Against the Machines” *The Atlantic* 26 Oct 2011
- Caroline Hanley, “Putting the Bias in Skill-Biased Technological Change?” *American Behavioral Scientist* 58(3): 400-415, March 2014

**MIDTERM #2 DUE ON BCOURSES MONDAY, NOVEMBER 14<sup>TH</sup>**

16 Wed (Technology & inequality, cont’d)  
 No new readings.

Nov 18 Fri (Technology & inequality, cont'd)  
No new readings.

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21 Mon **The social context of technological innovation**  
*Reading:* Fred Block & Matthew Keller, "Where Do Innovations Come From?"

23 Wed ◀◀◀ **NON-INSTRUCTIONAL DAY: NO CLASS** ▶▶▶

25 Fri ◀◀◀ **THANKSGIVING BREAK: NO CLASS** ▶▶▶

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28 Mon (The social context of technological innovation, cont'd)  
No new readings.

30 Wed **The commercialization of academic science?**  
*Reading:* Steven Vallas & Daniel Kleinman, "Contradiction, Convergence, and the Knowledge Economy" *Socio-Economic Review* 6(2): 283-311, 2008

Dec 2 Fri (The commercialization of academic science?, cont'd)  
No new readings

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5 Mon **READING,**

7 Wed **RECITATION, and**

9 Fri **REVIEW**

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16 Fri **FINAL EXAM 11:30 AM – 2:30 PM**