

UNIVERSITY OF CALIFORNIA – DAVIS

AMS 5: TECHNOLOGY IN AMERICAN LIVES, WINTER 2017

4 Units, GE Credit: Arts & Humanities, Social Sciences, and Writing Experience
Syllabus (latest updated on: 5 January 2017)

**Course Reader and up-to-date syllabus are available at: <https://ucdavis.box.com/v/AMS5-Winter2017>
[requires UC Davis login]**

Lecture:

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Tue & Thu 12:10 - 1:30 PM, Olson 6

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Wedn, 4:10 - 5:00 & 5:10 - 6:00 PM,
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I. OVERVIEW

Description:

This course presents technology in several perspectives. Above all, the course asks students to go beyond grasping technologies as finished “things” in the world, emerging fully formed—as if by magic—delivered to a doorstep. Instead, we explore the ways in which technology is **socially constructed**, contested, and continually transformed. Furthermore, we will study the ways in which technology shapes—and is shaped—by culture. Students are expected to produce original writing on these processes.

Technology in American Lives (TIAL) draws from interdisciplinary readings that will have several characteristics. More specifically, TIAL is informed by several bodies of scholarly work—including (but not limited to) critical race, cultural, and ethnic studies; feminist, women, gender, and sexuality studies; architectural and landscape history; and, militarization and infrastructure studies. The texts we will read and interpret together are situated in specific geographic, temporal (historical and contemporary), and material contexts.

As an intro-level class, TIAL puts the messy world of technologies into an order that we can follow, tracing **an arc from the earth to waste** over the length of the quarter. Furthermore, we will traverse through many different spatial **scales** to better understand where technologies come from and how they are developed, drawing from feminist, Marxian, and environmentalist critiques of production. Students that wish to take this course should be aware that we do look critically at technologies, but it is not a rejection of technology; instead, it’s a course devised to begin to introduce students to an imagination of different socio-technical possibilities.

Starting Points:

What is, as the course title alludes to, an American life? How do we study technology, itself a fraught concept, when the idea of an **American life** is unstable and historically variable? To answer these questions, we will examine technologies and American lives in **transnational contexts**. If anything, American lives are constantly crisscrossed by vectors of trade, media, migration, and infrastructure,

putting American lives in motion and in relation to many non-American contexts. We will take seriously the complexity of experiences in so-called America, beyond simplistic categories of citizenship and belonging.

Furthermore, technologies traverse with and within **human and animal pathways and bodies**; an American life can thus be understood—biologically, philosophically, legally—in many ways. The course will ask the students to question their perceptions of borders and populations. In short, what is a technologically mediated and connected body, and in effect, a life itself? In addition, the class will introduce the role of the nation-state in researching, producing, and privatizing technologies.

More concretely, establishing that something is socially constructed can be deceptive — the social labor embedded in making a technology, as Marx long ago observed, must contend with the limits and possibilities of nature in the world; possibilities are not endless — e.g. flight must deal with gravity; pharmaceuticals only work in certain dosages, etc. But just because something is socially constructed within given parameters in space, time, nature, and economics doesn't mean that it is finalized. The material presence of a technology is not a zero-sum game. Americans and America's colonial subjects have created technologies under many rubrics of racial ideology, gender determinism, and accumulative goals, to name a few, and these rubrics have been and can be altered, resisted, or appropriated.

Finally, in the course, we will read many authors, only some of whom are “Americans,” but all have important concepts and contributions on thinking about—and with—technologies and Americans.

II. WRITING

AMS 5 satisfies Arts & Humanities, Social Sciences, and Writing Experience GE credit. Thus, we will **write** —and write in all kinds of ways (e.g. graded/ungraded, academic/non-academic). If English is not your first language, need help with grammar, or have any other concerns, don't worry — the goal is that everyone has the same chance to improve their writing.

We write because writing is a time-tested technology of thinking deeply. If you feel stuck in your writing, try working offline, with a pen or pencil, writing in your journal or notepad.

For assistance outside of class, check out the services offered by the UC Davis Student Academic Success Center and visit their facilities: <http://success.ucdavis.edu/academic/index.html>

III. COURSE OBJECTIVES

By the end of the quarter, students taking this class should:

- deepen understanding of technological production and the cultural imbrications of technology;
- gain familiarity with methods, key questions, and debates in the field of American Studies;
- improve **discussion, reading, and writing skills**, through a range of assignments of varying lengths and types;
- become more critical thinkers, an important skill for political participation, creativity, and contributions to society.

IV. GRADING AND ASSIGNMENTS

20% Technology Précis – a research project on a technology of your choice that will cross feed with the final exam.

20% Midterm Exam – demonstrate reading comprehension at roughly the halfway point.

30% Final Exam – slightly more elaborate than the midterm; will combine your chosen technology with the readings (covers the entire quarter).

10% Short Writing Exercises – in lecture or section, at the teaching team's discretion.

10% Reading Journal – collection dates will be at our discretion and will be returned to you asap.

10% Section Attendance and Participation

- Possible extra credit will be at the teaching team's discretion.

- Please – **always** backup your files; lost data will not be grounds for an extension.
- The Professor and the Teaching Assistants (TAs) work as a teaching team.
- We work together to develop rubrics for consistent and fair evaluation; that said, in general:
- Expect the midterm and final to measure the degree of engagement with the reading material, the originality of ideas, argument development, clarity, and the ability to marshal evidence.
- The précis assignment is a short text that will demand a modicum of original research using reliable, authored sources (not Wikipedia or similar).
- We do not grade on a curve.
- In general, your TA will grade your submitted materials in consultation with Prof. Arbona; the teaching team will meet to assess student progress and discuss consistent and fair grading across sections.
- We do not change a grade except in the case that we made a calculation error. Please keep in mind that the course grade takes into account each individual's progress over the course of the entire quarter. Do not rely on rumors to gauge the evaluation of your work.
- To do well in this course:
 - Read the assigned materials; participate, and ask **informed** questions. More on this below.
 - We urge students to come to **office hours**. This is part of a learning process. The TAs

will have more info on their specific requirements re: office hours.

- This is a **4 unit course**, which means it demands an *estimated 12 hours a week*: 4 hours in class (lectures and section), and about 8 hours on your own prepping,

writing, reading, and studying. You should spread the work time into small, manageable increments. Do anywhere between half an hour to two hours of work a day. Cramming before class will almost assuredly not yield great results.

V. PEDAGOGICAL FORMAT

- **You are your own best educator, and it involves doing the work and engaging.** What does this look like? Continue reading...
 - Bring an old school, **analog** notebook to lecture and section — and use it. Do not lose your notes. **Keep all your notes in the same place (preferably with your reading journal too; see requirements).**
 - You may like to type, and expand on, your notes after class time; you might find that this helps you remember, retain, and improve ideas. It takes much less time than you may think it does and will make your critical analysis much stronger.
- To sustain a productive and engaging teaching environment, laptops and other electronic devices are **not allowed during the lecture portion**. Your TA will announce their specific section policies.
 - **Have all the course readings available in section and lecture.** These can be brought in hardcopy or available on your laptop or flat screen, but you can only use your electronic devices during the discussion portion (roughly second half, after the break) of lecture time. Do not count on wifi always working. Have your readings always backed-up on your own device or at worst, a portable drive.
 - **Educational research shows that reading on paper is much more effective than reading on a screen.** The reader will be available for purchase or to print, and extra copies will be on reserve at Shields Library, where you can also check it for two hours at a time.
 - We might have a couple of extra course readers to lend out. Please discuss with us if interested in this arrangement. You may need to share it with a colleague.
- **The lecture time is a space where you should listen and think deeply.**
 - Take advantage of exercises in lecture to probe the readings.
 - Visit office hours to ask questions and clarify thoughts.
 - The teaching team likes to know who is attending lecture, particularly to be able to diagnose poor performance patterns over time and help you improve. Partly for this reason, lecture **will include unannounced in-class writing exercises**.
 - There are no late submissions of these. These unannounced exercises will not be checked for content—only for submission—and will be returned in section for your class file. Keep these in your folder, binder, or scan them into your hard drive.
 - Be organized with your folders; it will help you review better.
- It will be difficult to understand the material if you don't come to class. Furthermore, if you miss lecture, you will miss various threads that contextualize the lessons of the readings, plus valuable assignment insights.
 - Your TAs have their own section guidelines with more detail. Bottom line, we expect you to be here (or be in contact so we know what's up).
- The lecture slides may or may not be shared, depending on faculty prerogative. Contact us if you need them for a specific purpose.
- Participation in discussions during lecture and section are where we do the heavy lifting. There is a certain art to participation; in other words, it requires thoughtfulness and preparation (see the previous points above on how to prep).

- We encourage you to talk and discuss; we all do part of our thinking by articulating our thoughts. That is to say, ideas in your head can be deceptively clear – to you. But these thoughts become surprisingly messy when first elaborated. This is why it takes time to work ideas out, and you should take time to do so as much as possible.
- **Engagement:** We try to create a classroom environment of engagement and learning from diverse perspectives. At times, course content may be difficult to absorb or somewhat controversial.

VI. ACCESSIBILITY:

UC Davis strives to create an accessible learning environment and you can find out more about campus recommendations and policies at this website: <http://accessibility.ucdavis.edu/faculty/lms.html> .

Beyond campus policies, the AMS 5: TIAL team always wants to know how we can accommodate your needs. Please communicate with any of us if you feel like there is something we could improve.

We commit to protecting student confidentiality and privacy when communicating with us.

If a student prefers not to or simply cannot come forward to discuss something with us, we suggest contacting an impartial and confidential student ombudsperson or a student affairs advocate who can contact any of us (see link below).

VII. RESOURCES:

- Student Ombuds: <http://ombuds.ucdavis.edu/>
- Health and Counseling: <https://shcs.ucdavis.edu/about/shwc>
- Writing support: <http://success.ucdavis.edu/academic/writing.html>
- Undergraduate Library guide: <http://guides.lib.ucdavis.edu/undergrad>
- Directory of Student Services: <http://studentaffairs.ucdavis.edu/about/directory.html>

VIII. SCHEDULE AND READING

Course readings and supplemental materials are kept on Canvas.

PLEASE NOTE THE FOLLOWING:

• **The readings selected below do not represent an absolute ideal;** they simply reflect a host of criteria (level of difficulty, length, and the balancing of competing pedagogical objectives that never exist in perfect harmony). Students are encouraged to dig deeper. In addition, for the chapters from books assigned, generally the books themselves are also good sources for further study.

• Some essays below were chosen for length and for the summarized content they contain, even though the authors have gone on to publish them in revised form as part of revised book projects. Students may want to search the authors that strike them as interesting for other publications and keep up with new projects.

JANUARY: week 1 – BEGINNINGS

1/10 – Overview of the course. Some important guidelines on the first readings.

1/12 – **What is “technology”?**

Benjamin, Walter. “The Work of Art in the Age of Its Technological Reproducibility [First Version].” Michael W. Jennings, Transl., *Grey Room*, April 1 (2010) [1936]: 11–37.

Marx, Leo. “‘Technology’: The Emergence of a Hazardous Concept.” *Social Research*, Vol. 64, No. 3, (1997): 965-988.

JANUARY: week 2 – ELEMENTS AND MATTER

1/17 – **Technology as second nature**

Smith, Neil. Selection from “The Production of Nature,” *Uneven Development: Nature, Capital, And The Production Of Space*. Athens: University of Georgia Press (2008) [1984]: 49-91. (See reading for required pages).

1/19 – The material origins of technology

Mumford, Lewis. Selections from Chapter 2: “Agents of Mechanization” in *Technics and Civilization*. Chicago: The University of Chicago Press (2010) [1934]: 65-94.
(See reading for required pages).

Klinger, Julie. “A Historical Geography of Rare Earth Elements: From Discovery to the Atomic Age.” *The Extractive Industries and Society* 2, no. 3 (2015): 572–80.

*** Technology Précis Semester Assignment will be handed out w/ due dates.**

JANUARY: week 3 – KNOWLEDGE AND THE STATE

1/24 – Scientific enclosures: the case of germplasms and political sovereignty

Kloppenborg, Jack. Chapter 3, “The genetic foundation of American agriculture” in *First the Seed: the Political Economy of Plant Biotechnology, 1492-2000*. Madison: University of Wisconsin Press (2004) [1984]: 50-65.

Pasternak, Shiri. “Empty Lands and Raw Seeds: From the Doctrines of Discovery to Patents on Life.” *L’observatoire de la génétique*, no. 33 (2007).

1/26 – Scientists and cultures of simulation – Guest lecture:

Katherine Chandler, Culture and Politics Program, Walsh School of Foreign Service, Georgetown University

Chandler, Katherine. “A Bee with an Electronic Brain: Drone Flights in Cold War America.” *Humanity: An International Journal of Human Rights, Humanitarianism, and Development*, vol. 6 no. 2, 2015, pp. 309-316.

Masco, Joseph. “Nuclear Techno-aesthetics: Sensory Politics from Trinity to the Virtual Bomb in Los Alamos.” *American Ethnologist* 31, no. 3 (2004): 349–73.

JANUARY-FEBRUARY: week 4 – BODIES AND EMBODIMENTS

1/31 – Genetic capital

TallBear, Kim. “The Emergence, Politics, and Marketplace of Native American DNA,” *Routledge Handbook of Science, Technology and Society*. Kleinman, D.L., Moore, K., eds. New York: Routledge (2014): 21-35.

2/2 – Gendered labor

Briggs, Laura. Chapter 4, “Demon Mothers in the Social Laboratory: Development, Overpopulation, and ‘the Pill,’ 1940-1960.” *Reproducing Empire: Race, Sex, Science, and U.S. Imperialism in Puerto Rico*. Berkeley: University of California Press (2002): 109-141.

FEBRUARY: week 5

2/7 – MIDTERM

2/9 – Technoscapes: cultural spaces of technological immersion

Picon, Antoine. “Anxious Landscapes: From the Ruin to Rust.” Translated by Karen Bates. *Grey Room* 1, September 2000: 64–83.

FEBRUARY: week 6 – SPACES AND SPATIALITY

2/14 – Technological space and the body

Schüll, Natasha Dow. Chapters 1 & 2 in *Addiction by Design: Machine Gambling in Las Vegas*. Princeton, NJ: Princeton University Press (2014): 36-75.

2/16 – Bodies in the machine

Murphy, Michelle. “Building Ladies into the Office Machine.” *Sick Building Syndrome and the Problem of Uncertainty: Environmental Politics, Technoscience, and Women Workers*. Durham N.C.: Duke University Press, 2006: 35-56

FEBRUARY: week 7 – LAND AND SITUATEDNESS

2/21 – Placing bodies into rationalized space

Schulten, Susan. Chapter 4: “Slavery and the Origins of Statistical Cartography,”
Mapping the Nation: History and Cartography in Nineteenth-Century America.
Chicago, Ill.: Univ. of Chicago Press (2013): 119-155.

2/23 – The origins of surveillance

Browne, Simone. “Everybody’s Got a Little Light Under the Sun: Black Luminosity and
the Visual Culture of Surveillance.” *Cultural Studies* 26, no. 4, July (2012): 543–
64.

FEBRUARY-MARCH: week 8 – NETWORKS

2/28 – **Technology Précis due**

Historical incisions and the uneven spatial distribution of network technology

Varnelis, Kazys. “The Centripetal City.” *Cabinet*, no. 17, Spring 2005.
<http://cabinetmagazine.org/issues/17/varnelis.php>. Accessed on December 16,
2016.

3/2 – Visualizing infrastructure and agency over information

Starosielski, Nicole. “Warning: Do Not Dig?: Negotiating the Visibility of Critical
Infrastructures.” *Journal of Visual Culture* 11, no. 1, April 1, 2012: 38–57.

_____. “Critical Nodes, Cultural Networks: Re-mapping Guam’s Cable Infrastructure.”
Amerasia Journal 37:3, 2011: 18-27

MARCH: week 9 — DISCARDS

3/7 – Environmental racism and Silicon Valley

Park, Lisa Sun-Hee, and David N. Pellow. “Racial Formation, Environmental Racism,
and the Emergence of Silicon Valley.” *Ethnicities* 4, no. 3, September 1, 2004:
403–24.

3/9 – The plastic environment and the Anthropocene

Liboiron, Max. “Redefining Pollution and Action: The Matter of Plastics.” *Journal of
Material Culture* 21, no. 1, March 1, 2016: 87–110.

MARCH: week 10 – CYBORGS

3/14 – The cyborg body

Haraway, Donna. Selection from “A Cyborg Manifesto: Science, Technology, and
Socialist-Feminism in the Late Twentieth Century,” *Simians, Cyborgs, and
Women: The Reinvention of Nature*. New York: Routledge (1991): 149-182. (See
reading for required pages).

3/16 – Exam Review.

Final exam info distributed.

IX. FURTHER AFIELD:

- A bibliography for this course is available at:
https://www.zotero.org/groups/technology_in_american_lives/items
- **Helpful web resources related to this course:**
Discard Studies: <https://discardstudies.com/>
Social Media Collective: <https://socialmediacollective.org/>
Data and Society: <https://datasociety.net/>
Ingrid Burrington at *The Atlantic*: <http://www.theatlantic.com/author/ingrid-burrington/>
Limn <http://limn.it/>

X. IMPORTANT COURSE POLICIES

- **Your first point of contact is your section's TA.** Please be aware that Prof. Arbona may or may not respond to emailed queries, depending on overall workload for the campus, other teaching responsibilities, and research duties.
 - To discuss your work or course readings, please see Prof. Arbona in **office hours** or by appointment.
- Always use your UC Davis email address and check it on a regular basis in case we need to get a hold of you. The TAs will have further policies in section on their email policies.
- **Please be mindful of your colleagues – always.**
 - Mobile phones must be turned off or placed on mute at the beginning of lecture and sections. Do not check your phone until the break or until class is adjourned.
 - Your peers and faculty have different ways of concentrating on the material at hand. Please **respect everyone's space to learn and do not engage in non-academic distractions**. These prohibited activities may include texting, email, chats, social media, web surfing, on-screen games, and other related activities.
 - Activities that distract can be grounds for anyone from the teaching team to ask you to leave class to complete your non-school-related activity. This will have an impact on your grade.
- In general, laptops are not allowed in lecture; please contact us if you have any questions.
- **Plagiarism and academic misconduct:** Academic Senate policy requires that plagiarism be reported to Judicial Affairs, including improper use of web sources. **Not knowing what plagiarism is still constitutes plagiarism.** Plagiarism will be further explained in section. Plagiarism in this course can lead a number of consequences depending on the severity of the case, from partial or zero credit on an assignment to more serious academic consequences that could be decided by Student Judicial Affairs.
 - **Everyone** should consult the campus-wide document, "Avoiding PLAGIARISM: Mastering the Art of Scholarship" from the Office of Student Support and Judicial Affairs, even if you believe you understand plagiarism, available at:
 - <http://sja.ucdavis.edu/files/plagiarism.pdf>
 - For further questions, please discuss with your TA and read the FAQ at:
 - <http://sja.ucdavis.edu/faq.html#academic-integrity>
 - Other forms of academic dishonesty include:
 - submitting work for credit that you created for a different course,
 - material that was written by someone else (including hired help),
 - resubmitting work you did for this or another course.
 - Once again, consult the UCD Code of Academic Conduct for more information.
- **The teaching team for AMS 5 does not work solely on this course.** We all have various responsibilities and real lives to attend to, as do students, of course. We therefore try as best as we can to give you information well in advance, and in turn, we expect you to ask for any clarifications in a timely manner.
 - Some queries require further legwork involving additional investigation and at times, the attention of department chairs or campus administration. Last-minute or off-hours questions might not receive an answer or be resolved in time.
 - As a general policy, we are not able to give make-up exams or assignments, unless you have a documented reason.
 - The teaching team has to keep up with coursework and therefore is unable to cover material already explained in class and section. Sections and office hours with the teaching team are designed to **build** on the readings, lectures, and your writing, not to repeat material that someone missed due to reasons beyond the control of the teaching team.

- Take note of the important dates in this syllabus.
- Prolonged or frequent illnesses and absences are something we want to know about sooner rather than later. If you are absent due to illness or a family matter in a way that impacts your work, e-mail your TA ASAP.
- The course time is valuable to all of us. It is not a free-for-all. We build on readings and discussions in this time. Your participation should be based on the slow and careful accumulation of material drawing from our readings and lectures, to a large extent, and to some extent material you are familiar with from other courses. By and large, we are here to work on the course lessons, not willy-nilly points that come without careful consideration.
 - If a student is interrupting discussion, talking over other people, engaging in unconstructive and uninformed discourse, or otherwise affecting negatively the opportunities of peers and faculty to have their own opportunity to engage productively, the teaching team will bring this up with the student and discuss next steps.
- Please be aware that for most intents and purposes, California law prohibits recording someone (this includes faculty and students) without prior consent.
- The syllabus is a course map, and like any map, it could be revised depending on changing conditions.

XI. ACKNOWLEDGEMENTS:

Thank you to the following people for suggestions and assistance in preparing this class (in no particular order), and apologies for any involuntary exclusions. AMS faculty: Carolyn Thomas, Caren Kaplan, Eric Smoodin, Ryan Lee Cartwright, Julie Sze, Charlotte Biltekoff, Grace Wang, and Anjali Nath. The invaluable assistance from: Evelyn Farias, Aklil Bekele, Fatima Garcia, Carlos Garcia, Alex Dougherty, and Briana Desilva. And last but certainly not least, many, many inspirations, leads, and suggestions from: Kate, Chandler, Yanni Loukissas, Ian Alan Paul, Andrew Ventimiglia, Braulio Agnese, Martha Bridegam, Shannon Mattern, Alexandra Lange, Jacqui Shine, Aaron Wilcher, John Stehlin, Vera Khovanskaya, Toby Smith, Sofia Goodman-Arbona, John Elrick, and Xan Chacko.