

ANTH 313: SCIENCE, TECHNOLOGY, DEMOCRACY
(Syllabus is subject to change)
Jonah S. Rubin

Thurs 1:30p-3:50p
OLIN 309

Office Hours: Tuesdays, 1:30-4:30p, Hopson 303
Signup at: www.jonahrubin.com/office-hours

Moodle Enrollment Key: politicsF16

Course Description: In popular understandings, we tend to think of scientists and engineers as occupying relatively apolitical positions. While debates over government funding priorities or diversity in the laboratory occasionally pop up, we usually imagine scientists at the laboratory bench striving for the discovery of objective truths and engineers seeking to innovate new solutions to technical problems. By contradistinction, this course begins from the premise that science and technology are inherently political acts. That is, they are both the product of social conditions and, in turn, the condition of possibility for our collective ways of life. In calling science and technology political acts, we do not seek to dismiss their forms of practice (nor, for many of the authors we read, their claims to objectivity). Rather, in this course, we strive to understand how the existence of these expert communities affect and are affected by democratic politics.

Course Goals:

By the end of this course students should be able to:

- Research and write a scholarly analysis of science, technology, and democracy.
- Utilize different social scientific approaches to discuss the political meanings embedded in popular representations of science and technology in films, newspapers, and popular discourse.
- Apply the knowledges and analytic tools gained in class to a case study of the politics of scientific practice and technological production.

Course Requirements and Grading

- **Class participation** (10%),
- **Class Presentation(s)** (10% of final grade)
- **Paper Prep Assignments** (15% of final grade)
- **Midterm Paper** (20% of final grade)
- **Final Paper** (35% of final grade)

Class participation (10% of final grade) will include attendance of classes, active participation in classroom discussions, and attendance at the instructors' office hours. Attending all classes is mandatory, unless the student makes arrangements with me prior to her absence. Students are expected to read all required readings carefully and to come to class prepared to discuss them. And although there exists a wide range of ways to participate in the course (including in class, office hours, and through the course website), active participation is a requirement for this course, not extra credit.

Class Presentation(s) (10% of final grade): You will have to give either one or two presentations of about 10 minutes each over the course of the semester (we will make this determination on the first day of class). Operate on the assumption that both you and your classmates have already carefully worked through the text. Instead, your presentation will provide the class with a starting point for discussing the week's readings. You may wish to highlight something you found provocative, problematic, or even perplexing. It may be helpful to draw on your class research project for inspiration. Your presentation should not summarize the text, although it will likely be helpful to cite certain pages in helping the class follow the logic of your application, critiques, or questions about the text. Although you will be graded based on your in-class presentation, please send the instructor your presentation notes by 5p on Wednesday of the week you are presenting.

Midterm Paper (20% of final grade): You will compose a 5 page paper in response to questions distributed by the instructor. As with all formal writing, your thesis should have a well-developed thesis, a logical progression of argumentation, strong evidence from the texts we have read, and a bibliography formatted in a standard format (my personal preference is for Chicago author-date, but I will accept any standardized format).

Paper Prep Assignments (15% of final grade): To help you develop your final paper, we will conduct three preparatory exercises over the course of the semester. The first is designed to help you develop a research topic. The second will develop the research topic into a short, 2-page proposal. And the final assignment will be a peer review of the rough draft of your essay.

Final Paper (35% of final grade): You will select one case study about the intersection of science and technology studies and democratic processes. This may be a contemporary case in the news today, a historical dispute, a legal trial, an ethnographic case, or something else. Applying the readings, you will develop a 20-page research paper on the case study, demonstrating what this empirical case shows us about the relationship between science, technology, and democracy.

Alternative Final Projects (30% of final grade). Students with past experience may propose a photo essay, documentary film, podcast, web project, or other alternative to the traditional research paper. These alternative projects will need to be accompanied by a shorter written supplement relating the performance to the course themes. I reserve the right to deny a proposal for an alternative final project, if I feel that I do not have the expertise needed to fairly evaluate it.

Course Policies:

Screens Policy: Educational studies suggest that most people learn better when taking notes with a pen(cil) and paper. However, one of the goals of this course is to understand the ways new technologies enable and constrain our behavior. Therefore, you are permitted to take notes using electronic devices, if you choose to do so. Phones are not permitted.

Plagiarism and Academic Integrity Policy: This class has a zero tolerance policy on plagiarism. As per Bard College's Academic Regulations (<http://www.bard.edu/undergraduate/requirements/>): "The Bard faculty regards acts of plagiarism very seriously...Students who are found to have plagiarized or engaged in academic dishonesty will be placed on academic probation." Plagiarism will also result in an automatic failure in the course.

Disability Policy: If you require any accommodation for this course, please present the instructor with a copy of your Accommodation Verification Letter as soon as possible. Bard College's Disability Support Coordinator can be contacted at: disabilityservices@bard.edu or 845.758.7532.

Absence Policy: You are expected to attend all classes, arriving on time and remaining for the duration of the class. After more than two unexcused absences, I reserve the right to lower your final grade. After more than 6 unexcused absences, I reserve the right to withhold a passing grade. I will count two late-arrivals as equivalent to one absence.

Texts: This course will cover several full-length books. The following books are available for purchase at the campus bookstore. The remaining readings can be found on Moodle.

- Coleman, Gabriela 2014. *Hacker, Hoaxer, Whistleblower, Spy: The Many Faces of Anonymous*. New York.
- Kitcher, Philip 2001. *Science, Truth, and Democracy*. New York: Oxford University Press.
- Latour, Bruno. 1999. *Pandora's Hope : Essays on the Reality of Science Studies*. Cambridge, Mass.: Harvard University Press
- Roberts, Dorothy E. 2011. *Fatal Invention: How Science, Politics and Big Business Re-Create Race in the Twenty-First Century*, New York: The New Press

Course Schedule:

1 September 2016: Introductions

UNIT 1: IRRECONCILABLE ORIENTATIONS? CLASSIC APPROACHES TO SCIENCE IN DEMOCRACY

8 September 2016: Science as Vocation

- Weber, Max 1946. "Science as Vocation." In, *Max Weber: Essays in Sociology*. Translated and edited by H.H. Gerth and C. Wright, New York: Oxford University Press, pp. 129-156.

- Habermas, Jürgen 1991. “The Thesis of Internal Colonization.” In, *The Theory of Communicative Action. Volume Two. Lifeworld and System: A Critique of Functionalist Reason*. Translated by Thomas McCarthy. Boston: Beacon Press, pp. 332-373.

15 September 2016: The Politics of Urban Technologies

- Kitcher, Philip 2001. “Unacceptable Images,” “The Ideal of Objectivity,” “The World As We Make It,” and “The Myth of Purity,” “Well Ordered Science,” “Elitism, Democracy, and Science Policy,” and “Research in an Imperfect World,” In *Science, Truth, and Democracy*. New York: Oxford University Press, pp. 3-11, 43-62, 85-91, 117-146, 181-198.

22 September 2016: Scientific Truth versus Democratic Participation?

- Winner, Langdon. 1980. “Do Artifacts Have Politics?” *Daedalus* 109(1): 121–136.
- Joerges, B. 1999. “Do Politics Have Artefacts,” *Social Studies of Science* 29: 411-431.
- Woolgar, B. and G. Cooper. 1999. “Do Artefacts Have Ambivalence.” *Social Studies of Science* 29: 433-447.
- Booth et al. *The Craft of Research*, Chs. 3&4

➤ **25 September 2016:** Submit a tentative working thesis along the model developed by Booth et al for your final paper,

UNIT 2: SCIENCE, GENETICS, AND THE LAW

29 September 2016: The Politics of Genomics

- Abu el Haj, Nadia “Introduction” and “The Right of Return.” In, *The Genealogical Science: The Search for Jewish Origins and the Politics of Epistemology*, Chicago: The University of Chicago Press, pp. 1-32 and 181-217.
- Tallbear, Kim 2013. “The Genographic Project: The Business of Research and Representation” In, *Native American DNA: Tribal Belonging and the False Promise of Genetic Science*. Minneapolis, MN: University of Minnesota Press, pp. 143-176.
- Comaroff, John L. and Jean Comaroff 2009. “A Tale of Two Ethnicities.” In, *Ethnicity, Inc*. Chicago: The University of Chicago Press, pp. 86-116.

6 October 2016 Science and Public Policy I

- Roberts, Dorothy E. 2011. “Believing in Race in the Genomic Age,” “The Invention of Race,” “The New Racial Science,” “Redefining Race in Genetic Terms,” and “The Allure of Race in Biomedical Research,” and Embodying Race.” In, *Fatal Invention: How Science, Politics and Big Business Re-Create Race in the Twenty-First Century*, New York: The New Press, pp. 1-26, 57-80, and 104-146.

13 October 2016: Science and Public Policy II

- Roberts, Dorothy E. 2011. “The New Racial Technology,” “Pharmacoethnicity,” “Color Coded Pills,” “Race and the New Biocitizen,” “The New Biopolitics of Race,” “Genetic Surveillance,” and “Conclusion.” In, *Fatal Invention: How Science,*

Politics and Big Business Re-Create Race in the Twenty-First Century, New York: The New Press, pp. 147-225, 259-286, and 309-312.

➤ **Midterms Due 15 October 2016**

UNIT 3: DISCIPLINING THE SELF, DISCIPLINING TECHNOLOGY

20 October 2016 The Politics of Scientific Truth

- Foucault, Michel. 1984. "The Politics of Health in the Eighteenth Century." In *The Foucault Reader*, edited by Paul Rabinow. New York: Pantheon Books, pp. 273-289.
- Foucault, Michel 1991. "Governmentality." In *The Foucault Effect: Studies in Governmentality*, edited by Graham Burchell, Colin Gordon, and Peter Miller. Chicago: The University of Chicago Press, pp. 87-104.
- Rose, Nikolas. 1999. "Numbers." In *Powers of Freedom: Reframing Political Thought*. New York: Cambridge University Press, pp. 197-232.

27 October 2016 Feminist Approaches to the Scientific Power

- Haraway, Donna 1990. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century" In, *Simians, Cyborgs and Women: The Reinvention of Nature*. London: Routledge, pp. 149-181
- Haraway, Donna. 1988. "Situated Knowledges: The Science Question in Feminism and the Privelege of Perspectives." *Feminist Studies* 14(3): 575-599.

3 November 2016:

- Coleman, Gabriela 2014. *Hacker, Hoaxer, Whistleblower, Spy: The Many Faces of Anonymous*. New York: Verso, pp. 1-51, 81-112

10 November 2016

- Coleman, Gabriela 2014. *Hacker, Hoaxer, Whistleblower, Spy: The Many Faces of Anonymous*. New York: Verso, pp. 318 – 400.

Submit a Research Proposal of 2 pages in length. Your research proposal should name a topic of inquiry, a tentative thesis statement, the sources of data you will be drawing upon, and the literature you will be contributing to.

UNIT 4: MAKING ROOM FOR NON-HUMANS

NOTE Class will be rescheduled due to the American Anthropological Association annual meeting on 17 November 2016: The Politics of Nature

- Latour, Bruno 2004. "Introduction: What is to be done with Political Ecology," "Why Political Ecology Has to Let Go of Nature," and "How to Bring the Collective Together" and "A New Separation of Powers." In *Politics of Nature: How to Bring the Sciences into Democracy*. New Delhi, India: Orient Longman, pp. 1-52, 91-127

24 November 2016 Thanksgiving. No class! Enjoy!

1 December 2016: The Nature of Politics

- Latour, Bruno 2004. "Skills for the Collective," "Exploring Common Worlds" and "Conclusion: What is to Be Done? Political Ecology!" In *Politics of Nature: How to Bring the Sciences into Democracy*. New Delhi, India: Orient Longman, pp. 128-183, 221-235.

8 December 2016: Cosmopolitics

- de la Cadena, Marisol . "Indigenous Cosmopolitics in the Andes: Conceptual Reflections Beyond "Politics"." *Cultural Anthropology* 25, no. 2 (2010): 334-370.
- Coles, Kimberley A. "Election Day: The Construction of Democracy through Technique." *Cultural Anthropology* 19, no. 4 (2004): 551-580

15 December 2016:

- Paper Peer Review

➤ **Final Papers Due: 22 December 2016**