

Sociology 249/STS 249: Life Sciences and Society

TuTh 1:00-2:15PM | Diamond 221

Instructor Dr. Natalie Aviles

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Office Hours Tuesdays 11:00-1:00

Description:

What is social about the life sciences? In this course we consider what happens when biology, medicine, and social order meet. We will look at cases where individuals and groups draw on ideas from biology to justify ill-conceived and dangerous social reform projects, from eugenics to more recent efforts at using genomics as a tool to identify populations at risk for criminal behavior. We will also explore the role social forces play in shaping science, from profit motive in the market for pharmaceuticals to political activism around funding and regulation of biomedical science.

This course approaches topics in Science, Technology and Society (STS) from the perspectives of sociologists who study the cultural and political economic factors that have shaped the life sciences in the contemporary period. This course is cross-listed in Sociology and STS, but students from all majors who are interested in learning more about the relationship between life sciences and social forces are welcome.

Assigned Texts:

1. (*) Select articles and book chapters posted to Moodle

Evaluation:

Weekly reading responses (due every Thursday after week 1)	20%
Paper proposal and annotated bibliography (due March 15)	15%
Final paper poster sessions and presentations (May 1 and 3)	15%
Final paper (due May 7)	35%
Participation	10%

Course Schedule:

Week	Topic	Required Reading
1.2: Thursday, 2/8	NO CLASS	N/A

Week	Topic	Required Reading
2.1: Tuesday, 2/13	What's life got to do with it?	*Latour. 2014. "Agency at the time of the Anthropocene." <i>New Literary History</i> 45: 1-18.
2.2: Thursday, 2/15	Whose life is it, anyway?	Nikolas Rose. 2009. <i>The Politics of Life Itself: Biomedicine, Power, and Subjectivity in the Twenty-first Century</i>. Princeton: Princeton University Press: Chapter 1.
3.1: Tuesday, 2/20	Evolution and society: from Darwin to eugenics	*Gould and Lewontin. 1979. "The Spandrels of San Marco and the Panglossian Paradigm: A Critique of the Adaptationist Programme." <i>Proceedings of the Royal Society of London. Series B, Biological Sciences</i> .
3.2: Thursday, 2/22	Scientific racism in America	*Panofsky. 2014. <i>Misbehaving Science: Controversy and the Development of Behavior Genetics</i> . Chicago: University of Chicago Press: Chapter 6.
4.1: Tuesday, 2/27	Genetics and identity as social justice	*Nelson. 2016. <i>The Social Life of DNA</i> . Boston: Beacon Press: Chapter 4.
4.2: Thursday, 3/1	Genetics and identity as social exclusion	Panofsky and Donovan. 2017. "When Genetics Challenges a Racist's Identity: Genetic Ancestry Testing among White Nationalists." SocArxiv Pre-prints.
5.1: Tuesday, 3/6	Of persons and populations: Public health and risk	*Hausman, Ghebremichael, Hayek, and Mack. 2014. "Poisonous, Filthy, Loathsome, Damnable Stuff: The rhetorical ecology of vaccination concern." <i>Yale Journal of Biology and Medicine</i> , 87(4): 403-416.
5.2: Thursday, 3/8	The <i>other</i> other 99%: animal models in biomedical research	*Friese. 2013. "Realizing potential in translational medicine: The uncanny emergence of care as science." <i>Current Anthropology</i> 54(S7): S129-S138.
6.1: Tuesday, 3/13	Promises and pitfalls of new technologies in the life sciences	*Clarke et al. 2010. <i>Biomedicalization: Technoscience, Health, and Illness in the U.S.</i> Durham: Duke University Press: Chapter 1.

Week	Topic	Required Reading
6.2: Thursday, 3/15	Genetic testing and the emergence of the potential patient	*Lowy. 2010. <i>Preventive Strikes: Women, Precancer, and Prophylactic Surgery</i> . Baltimore: Johns Hopkins Univeristy Press: Chapter 3.
7.1: Tuesday, 3/20	Public reception and understandings of genetic arguments	*Stivers and Timmermans. 2017. "The actionability of exome sequencing testing results." <i>Sociology of Health & Illness</i> 39(8): 1542–1556.
7.2: Thursday, 3/22	An expertise gap in biomedicine? Bringing patients and activists into knowledge production	*Navon and Eyal. 2014. "The trading zone of autism genetics: Examining the intersection of genomic and psychiatric classification." <i>BioSocieties</i> 9(3): 329-352.
8.1: Tuesday, 3/27	NO CLASS (Spring recess)	N/A
8.2: Thursday, 3/29	NO CLASS (Spring recess)	N/A
9.1: Tuesday, 4/3	Entrepreneurialism in the life sciences	Steven Shapin. 2009. <i>The Scientific Life: A Moral History of a Late Modern Vocation</i>. Chicago: University of Chicago Press. Ch. 7
9.2: Thursday, 4/5	The triple helix: academia, industry, and government research	*Elizabeth Popp Berman. 2011. <i>Creating the Market University: How Academic Science became an Economic Engine</i> . Princeton: Princeton University Press. Ch. 6
10.1: Tuesday, 4/10	Federal regulation of biomedical research	Steven Epstein. 2008. <i>Inclusion: The Politics of Difference in Medical Research</i>. Chicago: University of Chicago Press. Ch. 6
10.2: Thursday, 4/12	Biotechnology and capitalism	Kaushik Sunder Rajan. 2006. <i>Biocapital: The Constitution of Postgenomic Life</i>. Durham: Duke University Press. Introduction
11.1: Tuesday, 4/17	Pharmaceuticals and citizenship in a global market	*Stefan Ecks. 2008. "Global pharmaceutical markets and corporate citizenship: The case of Novartis' anti-cancer drug Glivec." <i>BioSocieties</i> 3(2): 165-181.
11.2: Thursday, 4/19	Politics, post-truth, and the possibility of scientific knowledge and debate	*Oreskes and Conway. 2010. <i>Merchants of Doubt</i> . New York: Bloomsbury: Chapter 5.
12.1: Tuesday, 4/24	Poster workshopping	N/A
12.2: Thursday, 4/26	Poster workshopping	N/A

Week	Topic	Required Reading
13.1: Tuesday, 5/1	A brave new world: the future of biopolitics and the value of life	*Hood. 2017. "The science of value: Economic expertise and the valuation of human life in US federal regulatory agencies." <i>Social Studies of Science</i> 47(4): 441–465
13.2: Thursday, 5/3	NO CLASS (Colby Liberal Arts Symposium)	N/A
14.1: Tuesday, 5/8	Poster presentations, wave 1	N/A
14.2: Thursday, 5/10	Poster presentations, wave 2	N/A

Expectations:

Assigned readings are listed on the syllabus according to the day they will be discussed. You are expected to have completed these readings prior to coming to class on the day we discuss the relevant material. This course is taught in a seminar style. As such, you are expected to come to class prepared to actively participate in discussions about the reading assigned for that day. Always bring a copy of the assigned material to class.

Attendance in seminar is mandatory. If you must miss more than 3 class sessions it is important you notify me or your advising dean.

While you are welcome to study with other students, your written work should reflect your individual intellectual effort appropriately applied to the class assignments. I take academic integrity very seriously and will forward any suspected academic integrity to the appropriate disciplinary body without hesitation.

If you are concerned about your ability to complete any of these assignments in a timely manner, please communicate with me well in advance. I will always consider granting extensions where they are appropriate.