

# Sociology 298B/STS 298D: Life Sciences and Society

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

<b>Instructor</b>	Dr. Natalie Aviles	<b>E-mail</b>	nbaviles@colby.edu
<b>Office</b>	Diamond 205	<b>Office Hours</b>	Tuesdays 11:00-1:00

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## 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. Alondra Nelson. 2016. *The Social Life of DNA: Race, Reparations, and Reconciliation After the Genome*. Boston: Beacon Press.
2. Aaron Panofsky. 2014. *Misbehaving Science: Controversy and the Development of Behavior Genetics*. Chicago: University of Chicago Press.
3. Stefan Timmermans and Mara Buchbinder. 2012. *Saving Babies?: The Consequences of Newborn Genetic Screening*. Chicago: University of Chicago Press.
4. (\*) 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 9)	15%
Final paper poster sessions and presentations (May 2 and 4)	15%
Final paper (due May 8)	35%
Participation	10%

Course Schedule:

Week	Topic	Required Reading
1.2: Thursday, 2/2	Introduction to the Course	N/A
2.1: Tuesday, 2/7	A history of race as a scientific and political project	Nelson, Introduction and Ch. 1
2.2: Thursday, 2/9	Public stakeholders in scientific research	Nelson, Ch. 2-3
3.1: Tuesday, 2/14	Understanding race projects in American context	Nelson, Ch. 4-5
3.2: Thursday, 2/16	Science as a tool for social justice	Nelson, Ch. 6-9
4.1: Tuesday, 2/21	Scientific fields and norms	Panofsky, Introduction and Ch. 1
4.2: Thursday, 2/23	Ideology and inquiry	Panofsky, Ch. 2-3
5.1: Tuesday, 2/28	The seductive power of genetic reductionism	Panofsky, Ch. 5-6
5.2: Thursday, 3/2	Genetics under the long shadow of eugenics	Panofsky, Ch. 7 and Conclusion
6.1: Tuesday, 3/7	Genetic testing and the emergence of the potential patient	<a href="#"><u>Ilana Lowy. 2010. <i>Preventive Strikes: Women, Precancer, and Prophylactic Surgery</i>. Baltimore: The Johns Hopkins University Press. Introduction and Ch. 8</u></a>
6.2: Thursday, 3/9	Promises and pitfalls of genetics in medicine	Timmermans and Buchbinder, Introduction and Ch. 1
7.1: Tuesday, 3/14	Patient reception and understandings of genetic arguments	Timmermans and Buchbinder, Ch. 2 and 4
7.2: Thursday, 3/16	An expertise gap in biomedicine?	Timmermans and Buchbinder, Ch. 5-6
8.1: Tuesday, 3/21	NO CLASS (Spring recess)	N/A
8.2: Thursday, 3/23	NO CLASS (Spring recess)	N/A
9.1: Tuesday, 3/28	Evolution of the scientific career	<a href="#"><u>Steven Shapin. 2009. <i>The Scientific Life: A Moral History of a Late Modern Vocation</i>. Chicago: University of Chicago Press. Ch. 1 and 7</u></a>
9.2: Thursday, 3/30	The triple helix: academia, industry, and government research	*Elizabeth Popp Berman. 2011. <i>Creating the Market University: How Academic Science became</i>

Week	Topic	Required Reading
		<i>an Economic Engine</i> . Princeton: Princeton University Press. Ch. 6 and 7
10.1: Tuesday, 4/4	Federal regulation of biomedical research	<a href="#">Steven Epstein. 2008. <i>Inclusion: The Politics of Difference in Medical Research</i>. Chicago: University of Chicago Press. Ch. 4 and 6</a>
10.2: Thursday, 4/6	Biotechnology and capitalism	<a href="#">Kaushik Sunder Rajan. 2006. <i>Biocapital: The Constitution of Postgenomic Life</i>. Durham: Duke University Press. Introduction and Ch. 1</a>
11.1: Tuesday, 4/11	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, 4/13	Translational research and the limits of neoliberal science	*Natalie Aviles. "Situated practice and the emergence of ethical research: HPV vaccine development and organizational cultures of translation at the National Cancer Institute, 1991-2008." Unpublished manuscript.
12.1: Tuesday, 4/18	Poster workshopping	N/A
12.2: Thursday, 4/20	Poster workshopping	N/A
13.1: Tuesday, 4/25	A brave new world: the future of biopolitics	<a href="#">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.</a>
13.2: Thursday, 4/27	NO CLASS (Colby Liberal Arts Symposium)	N/A
14.1: Tuesday, 5/2	Poster presentations, wave 1	N/A
14.2: Thursday, 5/4	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.