

ANTH 280K: Social Studies of Science & Technology

Monday, Wednesday, Friday 12-1:00; University Union 102

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Social Science 1, 218; Office Hours: Mondays 10:45-11:45

Course Overview

Since the late 1980s, the study of science and technology on the part of social scientists has slowly been gathering momentum. Approaches have varied, from the history and philosophy of science to the empirical studies of sociologists and anthropologists, but their concerns are largely shared: The social construction of objectivity and rationality, social divisions in the practice and foundations of science, and the roles of non-human and material actors in science and society. This course will consider a number of early and contemporary ethnographies of science, medicine, and technology alongside contributions by philosophers and historians of science in order capture the breadth of science and its practice in the present.

Our guiding question is this: How do cultural expectations shape the pursuit and implementation of science? To answer this question, we will consider a number of ethnographies that focus on the intersection of culture, society, science, and nature, from contemporary laboratory practice and the negotiation of indigenous intellectual rights to the use of medicine and science in colonial and postcolonial contexts.

Required Texts

Anderson, Warwick. *Colonial Pathologies: American Tropical Medicine, Race, and Hygiene in the Philippines*. Durham: Duke University Press, 2006.

Biagioli, Mario, ed. *The Science Studies Reader*. New York: Routledge, 1999.

Jones, James H. *Bad Blood: The Tuskegee Syphilis Experiment*. New York: Free Press, 1993.

Song, Priscilla. *Biomedical Odysseys: Fetal Cell Experiments from Cyberspace to China*. Princeton, NJ: Princeton University Press, 2017.

TallBear, Kim. *Native American DNA: Tribal Belonging and the False Promise of Genetic Science*. Minneapolis, MN: University of Minnesota Press, 2013.

Verran, Helen. *Science and an African Logic*. Chicago, IL: University of Chicago Press, 2001.

Grading & Assignments:

Reading Guides (20%) – Students are required to complete at least 2 reading guides each week. To receive full credit, students should plan to submit 3 reading guides each week. There are more readings than points available for Reading Guides, so students have some latitude in which readings they submit Reading Guides for. Reading Guides must be turned in to the instructor at the beginning of class in which the reading is discussed. When multiple readings from the same book by the same author are assigned, Reading Guides should cover all assigned readings. Late Reading Guides will not be accepted for credit. The Reading Guide is included as Appendix A.

Thresholds (3 at 20% each; 60% total) – TBD

In-Class Presentations (2 at 10% each; 20% total) – At two points during the semester, each student will be required to lead a discussion based on the assigned readings and will be provided with a partner or team for doing so.

Policies:

No exceptions to policies will be made for students who add the class late.

There is no extra credit available.

A curve will be applied to the final grades in the course based upon the highest attained grade (i.e. the highest grade will be rounded up to 100 and every other student will receive the same number of points).

No late work will be accepted for credit.

Students taking the course Pass/Fail must earn a C to receive a Pass.

Workload: This course is a 4-credit course, which means that in addition to the scheduled lectures, students are expected to do at least 9.5 hours of course-related work each week during the semester. This includes things like completing assigned readings, studying for tests, preparing written assignments, other tasks that must be completed to earn credit in the course.¹ I assume that undergraduate students can read 1 page of academic writing in 3 minutes; 100 pages of reading should require about 300 minutes, or 5 hours. You may need to read some of the texts more than once to fully understand them. In most cases, you should expect to be reading about 50-100 pages per week (approximately 3-4 hours) in addition to other course requirements.

Disability-related Equal Access Accommodations: Students wishing to request academic accommodations to insure their equitable access and participation in this course should notify the instructor as soon as they are aware of their need for such arrangements. Authorizations from Services for Students with Disabilities (SSD) are generally required.

¹ <http://www.binghamton.edu/academics/provost/documents/syllabus-credit-hours-0314.pdf>

We encourage you to contact SSD at 607-777-2686 to schedule an appointment with the Director or Learning Disabilities Specialist. The SSD website (www.binghamton.edu/ssd) includes information regarding their Disability Documentation Guidelines. The office is located in UU-119.

Academic Integrity – Academic misconduct of any sort will not be tolerated. Evidence of academic misconduct – which is not limited to plagiarism and cheating – will result in an immediate failing grade in the course and actions as dictated by university policy regarding academic integrity for undergraduate students.²

Contacting Me: I only check my email between 2-4 PM on weekday afternoons and during my office hours. I will always respond to emails within 24 hours, except for emails received on Fridays, which will be responded to on the following Monday. If you plan to stop by my office hours, please contact me ahead of time, either by email (mwolfmey@binghamton.edu) or in person before or after class.

Correspondence with instructor: Only correspondence that follows professional conventions of correspondence will be replied to by me. For example, your email should begin ‘Dear Professor Wolf-Meyer,...’ and end with your signature. Beginning an email without a salutation, a ‘Hey’ or other informal forms of address will ensure your email will not be responded to. If the answer to your question is clearly stated in the syllabus or assignment guidelines, instructors may not respond to your email.

Style Matters: All written work should be double-spaced, 12 point font, in Times New Roman, with 1 inch margins on all sides, and page numbers. Citation should look like this: (Author Year: Page), e.g. (Wolf-Meyer 2009: 408). Failure to meet these standards will result in a reduced grade.

² http://www.binghamton.edu:8080/exist9/rest/Bulletin2014-15/xq/2_academic_policies_and_procedures_all_students.xq?_xsl=/db/Bulletin2014-15/xsl/MasterCompose.xsl

Week 1 (August 22nd): Introduction
August 22nd – Course Introduction and Overview

August 24th
Read:
Jones' *Bad Blood* Chapters 1-6

Part One: Science in the Modern World

Week 2 (August 27th)
August 27th
Jones' *Bad Blood* Chapters 7-14

August 29th
In Class: *Deadly Deception*

August 31st
Verran's *Science and an African Logic* Chapters 1 & 2

Week 3 (September 3rd):
September 3rd – No Classes, Labor Day

September 5th
Read:
Anderson's *Colonial Pathologies* Introduction & Chapter 1

September 7th
Read:
TallBear's *Native American DNA* Introduction

Week 4 (September 10th):
September 10th – No Classes, Rosh Hashanah

September 12th
Read:
Song's *Biomedical Odysseys* Introduction

September 14th
Biagoli's *Science Studies Reader* Introduction

Week 5 (September 17th):

September 17th

Read:

Galison's "Trading Zone"

Shapin's "The House of Experiment in 17th Century England"

September 19th - No Classes, Yom Kippur

September 21st

Read:

Latour's "Give Me a Laboratory and I Will Raise the World"

Rheinberger's "Experimental Systems"

Week 6 (September 24th):

September 24th

Read:

Bourdieu's "The Specificity of the Scientific Field"

Daston's "Objectivity and the Escape from Perspective"

September 26th

Read:

Callon's "Some Elements of a Sociology of Translation"

Haraway's "Situated Knowledges"

September 28th -- Wolf-Meyer Traveling

Threshold #1 Due

Part Two:

Week 7 (October 1st): DNA and Its Publics

October 1st

Read:

October 3rd

Read:

Rabinow's "Artificiality and Enlightenment"

Kay's "In the Beginning was the Word?"

October 5th

Read:

TallBear Chapter 1

Week 8 (October 8th): Gender in/and Scientific Practice

October 8th

Read:

Fox Keller's "The Gender/Science System"

Traweek's "Pilgrim's Progress"

October 10th

Read:

Barad's "Agential Realism"

Wylie's "The Engendering of Archaeology"

October 12th – No Classes, Fall Break

Week 9 (October 15th):

October 15th

Read:

[my presentation]

October 17th

Guiding Questions part 2

October 19th

Read:

Lynch & Law's "Pictures, Texts, and Objects"

Rotman's "Thinking Dia-grams"

Week 10 (October 22nd):

October 22nd

Read:

Biagoli's "Aporias of Scientific Authorship"

Kohler's "Moral Economy, Material Culture, and Community in Drosophila Research"

October 24th

Read:

Latour's "One More Turn after the Social Turn..."

October 26th

Threshold #2 Due

Part Three:

Week 11 (October 29th):

October 29th

David & Flynn's Day

Read:

TallBear Chapters 3 & 4

Nelson's "DNA Ethnicity as Black Social Action?" (on myCourses)

Supplemental material:

Sarah Zhang's "[DNA is not your Culture](#)" & "[When a DNA Test Shatters your Identity](#)"

October 31st

Renate & Nethmi

Read:

Kelly's "The Construction of Masculine Science" (on myCourses)

Oudshoorn's "Imagined Men" (on myCourses)

Supplementary material:

TEDTalk: [Reflections on Women in Science](#)

November 2nd

Rebecca & David's Day

Read:

Song Chapter 2

Starr & Greisemer's "Institutional Ecology, 'Translation,' and Boundary Objects"

Supplementary material:

Amber Dance's "[Outsider Science](#)"

Week 12 (November 5th):

November 5th

Renate & Flynn's Day

Read:

Turkle's "What are we Thinking about when we are Thinking about Computers?"

Coleman's "From Internet Farming to Weapons of the Geek" (on myCourses)

Supplementary material:

Gebelhof's "[The Media is Ruining Science](#)"

Groshek & Bronda's "[How Social Media can Distort and Misinform when Communicating Science](#)"

November 7th

Rebecca & Nethmi's Day

Read:

Malone, Boyd & Bero's "Science in the News" (on myCourses)

Weingart's "The Lure of Mass Media and Its Repercussions on Science" (on myCourses)

Supplementary material:

Last Week Tonight – [Scientific Studies](#)

November 9th

Read:

Guiding Questions Part 3: In Which We Complete the Syllabus

Week 13 (November 12th)

November 12th

Read:

Martin's "Anthropology and the Cultural Study of Science"

Guthman's "Opening Up the Black Box of the Body in Geographical Obesity Research"

November 14th -- Wolf-Meyer Traveling

November 16th -- Wolf-Meyer Traveling

Week 14 (November 19th):

November 19th -- No Class, Wolf-Meyer Traveling

November 21st -- No Class, Thanksgiving

November 23rd – No Class, Thanksgiving

Week 15 (November 26th):

November 26th

Read:

Lorimer's "Probiotic Environmentalities"

Paxson's "Post-Pasteurian Cultures: The Microbiopolitics of Raw Milk Cheese in the US"

November 28th

Read:

Lien & Law's "'Emergent Aliens'"

Parrenas' "the Materiality of Intimacy in Wildlife Rehabilitation"

November 30th

Read:

Franklin's "From Blood to Genes?"

Mol's "Cutting Surgeons, Walking Patients"

Week 16 (December 3rd):

December 3rd

Read:

Martin's "Toward an Ethnography of Experimental Psychology"

Dumit's "Plastic Diagrams"

December 5th

Read:

Latour & Lenton's "Extending the Domain of Freedom"

December 7th

Read:

Threshold #3 Due on Thursday the 13th at 11:59 PM

5. What is the article, book, or chapters about, empirically? In other words, what is being studied as the object? Where are the events and people geographically situated? What is the scale of analysis? (e.g. nation, region, city, institution, person)? When did the study take place? Is there an explicit comparison? Is there an implicit comparison? If so, of what?

6. What methods were used in collecting data (ethnography, interviews, statistics, textual analysis, archival research)? Does the data look at what people do, say, or think? How was the data analyzed? What assumptions -- of the author or his or her society -- shaped the inquiry? What core values are assumed? What data would strengthen the text?

7. Discuss a passage (citing page number) that inspired you or frustrated you. Then type out a paragraph or two (160-300 words) discussing that passage and describing how it resonated or clashed with other course content (which might be a discussion, a film, or another text).

8. If you take one thing away from the text, what would it be? In other words, if you're telling a friend about this article, what's the one nugget you would share to start a conversation?