

Anthropology 130X: Ethnographies of Science

Instructor: Elizabeth Hare

emhare@ucsc.edu

T-Th 2-3:45pm

Office hours: Tuesdays, 12-2pm

Office: 327 Social Sciences 1

Course Overview:

One of the greatest strengths of ethnography as a genre of writing is its ability to make the familiar strange and strange familiar. Ethnography allows for detailed analysis across scale; from the lives of individuals, to the level of society, to theoretical conceptions of the world. As social studies of science have become increasingly commonplace since the late 1980s, scholars have used the ethnographic genre in their analyses. This course will introduce students to a number of ethnographies of science, medicine, and technology and will situate those within related concepts in anthropology and the history and philosophy of science. We will explore how cultural expectations shape scientific knowledge production and consider what anthropology contributes to the social studies of science. Ethnographies selected for this course explore the cultural dimensions of science within the laboratory, and beyond it, as it is applied to real world problems and political decision-making.

Close reading of assigned texts will be critical to student success in this class, and it is a skill that we will actively work to improve throughout the quarter. Twice-weekly reading questions will serve as an opportunity to analyze each reading. Each class meeting will include a lecture on the theoretical and historical background of the day's discussion topics as well as a student-led discussion of the texts. Students will rotate responsibility for leading the discussion, but active student participation is a mandatory component of each class meeting. The course culminates in a final exam that will require students to synthesize and reflect on course material.

Required Texts:

There are three required books for this course:

Traweek, Sharon. 1988. *Beamtimes and Lifetimes: The World of High Energy Physicists*.
Cambridge, MA: Harvard University Press.

Lowe, Celia. 2006. *Wild Profusion: Biodiversity Conservation in an Indonesian Archipelago*.
Princeton: Princeton University Press.

Montoya, Michael 2011 *Making the Mexican Diabetic: Race, Science, and the Genetics of Inequality*. Berkeley: University of California Press.

The books are available for purchase at the Literary Guillotine, 204 Locust Street (downtown) and will be on reserve at McHenry Library. All three titles are also available as e-books through the UCSC library.

PDF files of the other assigned texts will be available on ecommons.

Grading and Assignments:

Participation and Attendance (20%) – Students are expected to attend all classes and to regularly participate. Students are expected to come to class having done a close reading of the assigned texts and are expected to actively listen to lecture and be prepared to participate in discussions.

Reading Questions (30%) – Each week students will receive reading questions through eCommons. Answers are due the day of the assigned reading, and must be 4-6 sentences long and include examples from the reading.

Discussion Leader (10%) – Students will be responsible for leading one day of class discussion. Discussion Leader days will be assigned on the first day of class. Students will work collaboratively on this assignment.

Midterm exam (15% total) – The midterm exam will be an in-class exam consisting of multiple choice, fill-in-the-blank, and short essay questions.

Final exam (25% total) – The final exam will have both an in-class and a take-home portion. Students will receive the 2-3 page take-home essay question one week before it is due.

Policies:

No late work will be accepted for credit.

There is no extra credit available.

Workload – The expectation within the University of California system during the standard academic year is that for each credit hour of a course, students spend 3 hours in preparation during the week (e.g. 15 hours for a 5 credit course).

Academic Integrity – Although students are encouraged to work together to prepare for discussion, plagiarism of any sort is unacceptable and will not be tolerated. Evidence of plagiarism will result in an immediate failing grade in the course and actions as dictated by university policy regarding academic integrity on undergraduate students. The UCSC Academic Integrity Policy for undergraduates is online at http://www.ucsc.edu/academics/academic_integrity/undergraduate_students/.

Contacting Me – I highly encourage students to meet with me during my scheduled office hours to address questions about the class or to discuss anything in more detail. I respond to emails within 24 hours, except for emails received on Fridays, which I will respond to by Monday.

Class Schedule:

Week 1 – introduction to social studies of science

March 29 – introduction, course mechanics and expectations

March 31 –

Martin, Emily. 1998. Anthropology and the Cultural Study of Science. *Science, Technology, & Human Values* 23(1):24-44.

Sismondo, Sergio. 2010. “Studying Laboratories” in *An Introduction to Science and Technology Studies*. Sussex, United Kingdom: Wiley.

Week 2– cultures of science

April 5 –

Latour, Bruno, and Steve Woolgar. 1986[1979]. “An Anthropologist Visits the Laboratory,” in *Laboratory Life: The Construction of Scientific Facts*, pp. 43-90. Princeton: Princeton University Press.

Traweek, Sharon. 1988. *Beamtimes and Lifetimes: The World of High Energy Physicists*. Cambridge, MA: Harvard University Press. Preface, Prologue, Chp. 1

April 7 – cultures of science continued

Traweek, Sharon. 1988. *Beamtimes and Lifetimes: The World of High Energy Physicists*. Cambridge, MA: Harvard University Press. Chp. 2-3

Week 3 – paradigm shifts

April 12 –

Traweek, Sharon. 1988. *Beamtimes and Lifetimes: The World of High Energy Physicists*. Cambridge, MA: Harvard University Press. Chp. 4-5, Epilogue

April 14 –

Sismondo, Sergio. 2010. “The Kuhnian Revolution” in *An Introduction to Science and Technology Studies*. Sussex, United Kingdom: Wiley.

Barbour, Michael G. 1996. “Ecological Fragmentation in the Fifties” In *Uncommon Ground: Rethinking the Human Place in Nature*. Cronon, W. ed. Pp. 233-255. New York: Norton.

Week 4 – public understanding of science

April 19 –

Sismondo, Sergio. 2010. “The Public Understanding of Science” in *An Introduction to Science and Technology Studies*. Sussex, United Kingdom: Wiley.

Latour, Bruno 2004: “Why has Critique Run Out of Steam? From Matters of Fact to Matters of Concern” *Critical Inquiry* 30(2):225-248.

April 21 – no class

Week 5 –

April 26 – midterm exam

April 28 – expertise

Landstím, C. S., J. Whatmore, et al. 2011. “Coproducing flood risk knowledge: redistributing expertise in critical ‘participatory modeling’”. *Environment and Planning A* 43(7):1617-1633.

Mathews, Andrew S. 2005. “Power/Knowledge, Power/Ignorance: Forest Fires and the State in Mexico”. *Human Ecology* 33(6): 795-820.

Week 6 – science and environment

May 3 –

Lowe, Celia. 2006. *Wild Profusion: Biodiversity Conservation in an Indonesian Archipelago*. Princeton: Princeton University Press. Preface, Introduction, Chp. 1.

May 5 –

Lowe, Celia. 2006. *Wild Profusion: Biodiversity Conservation in an Indonesian Archipelago*. Princeton: Princeton University Press. Chp. 2-3.

Week 7 –

May 10 –

Lowe, Celia. 2006. *Wild Profusion: Biodiversity Conservation in an Indonesian Archipelago*. Princeton: Princeton University Press. Chp. 4-6.

May 12 – science and medicine

Martin, Emily 1991 “The Egg and the Sperm: How Science has Created a Romance Based on Traditional Gender Stereotypes”. *Signs* 16(3):485-501

Dumit, Joseph 2003. “Is it Me or My Brain? Depression and Neuroscientific Facts” *Journal of Medical Humanities* 24(1/2): 35-47

Week 8 –

May 17 –

Montoya, Michael 2011 *Making the Mexican Diabetic: Race, Science, and the Genetics of Inequality*. Berkeley: University of California Press. Preface, Introduction. Chp. 1

May 19 –

Montoya, Michael 2011 *Making the Mexican Diabetic: Race, Science, and the Genetics of Inequality*. Berkeley: University of California Press. Chp. 2-4.

Week 9 –

May 24 –

Montoya, Michael 2011 *Making the Mexican Diabetic: Race, Science, and the Genetics of Inequality*. Berkeley: University of California Press. Chp. 5-6. Conclusion.

May 26 – Security and futures

Lakoff, Andrew. 2008. “The Generic Biothreat, or How We Became Unprepared” *Cultural Anthropology* 23(3): 399-428.

Kosek, Jake. 2010. “Ecologies of Empire: On the New Uses of the Honeybee” *Cultural Anthropology* 25(4):650-678.

Week 10 –

May 31 –

Gusterson, Hugh. 2008. “Nuclear Futures: anticipatory knowledge, expert judgment, and the lack that cannot be filled”. *Science and Public Policy* 35(8):551-560.

Masco, Joseph. 2010. “Bad Weather: On Planetary Crisis” *Social Studies of Science* 40(1): 7-40.

June 2 – final exam