

Proseminar in Medicine, Science & Technology Studies (MSTS)

Anth 204A, Fall 2015

Tues 12:00-2:50pm
SBSG 3200

COURSE DESCRIPTION & OBJECTIVES

The fields of medical anthropology and science and technology studies have been shaped in recent decades by a series of questions regarding scientific inquiry, health and illness, and technological development. This course is predicated on the realization that the social phenomena studied by “medical anthropology” and “STS” are inextricably linked, and understanding these convergences requires moving among disparate fields of inquiry.

The objective of this course is to introduce students to the literatures and practices that constitute MSTS as a discipline and scholarly approach today. We will approach MSTS as 1) a body of literature, 2) an emergent (or merging) discipline with complex genealogies, 3) a growing emphasis within sociocultural anthropology, 4) a way of framing inquiries and selecting methods and data, and 5) a mode of social engagement.

Topics examined include the foundations of scientific knowledge; spaces and practices through which authoritative knowledge and “truth” is made; machines, humans, and technological systems; race, gender, and postcolonial perspectives; public engagement with medicine, science, and technology; and bioscience and biopower.

This course is open to all graduate students, and it is required of those seeking the M.A. in MSTS or the Graduate Concentration in Anthropologies of Medicine, Science, and Technology.

COURSE REQUIREMENTS

Your grade will be based on the following components:

1) Attendance and Participation (20%)

This class depends on student presence and engagement. Participation includes: being present in class and having completed the required readings; being able to discuss the readings and to constructively critique them; making comments that are pertinent to the course content; being able to contextualize the readings in relation to the broader themes of the course; and listening with integrity to what other students have to say. In pairs or small groups, you will facilitate at least two class discussions. You may conduct these sessions in any manner you choose, but your facilitation should focus on encouraging vigorous and thoughtful discussion about the ideas raised in and related to the assigned reading.

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Office hours: Wed 2-4pm or by appointment

Course Materials

All required readings can be downloaded from the course website: <https://canvas.eee.uci.edu/courses/579>

MSTs RESOURCES

The following resources are RECOMMENDED to help you become familiar with the field.

Books

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

Hackett et al., eds. 2008. *Handbook of Science & Technology Studies*, 3rd ed. Cambridge: MIT Press.

Hess, David. 1997. *Science Studies: An Advanced Introduction*. NY: NYU Press.

Journals & Blogs

Culture, Medicine & Psychiatry
Engaging Science, Technology & Society
Isis

Medical Anthropology
Medical Anthropology Quarterly
Science, Technology & Human Values
Social Science & Medicine
Social Studies of Science

Somatosphere (somatosphere.net)

Professional Organizations

Society for Social Studies of Science
(4S)
(4sonline.org)

Society for Medical Anthropology
(and Science, Technology, &
Medicine interest group)
(medanthro.net/interest-

COURSE REQUIREMENTS, cont.

2) Critical Reading Responses (20%)

You will complete critical reaction papers discussing the assigned readings for **six (6)** class sessions of your choosing. Responses should be approximately **500 words** and should be posted to the course forums no later than **9pm on Monday evening** before class. Please read your colleague's responses before class. Additional guidelines and analytical resources will be posted on the course website.

3) Keywords Contributions (20%)

The inspiration for this assignment comes from Raymond Williams's *Keywords: A Vocabulary of Culture and Society* (1976). Williams explains his approach:

It is not a dictionary or glossary of a particular academic subject. It is not a series of footnotes to dictionary histories or definitions of a number of words. It is, rather, the record of an inquiry into a *vocabulary*. ... I called these *Keywords* in two connected senses: they are significant, binding words in certain activities and their interpretation; they are significant, indicative words in certain forms of thought." (13)

Collectively, we will build a shared vocabulary of **Keywords in Medicine, Science, and Technology Studies**. Throughout the quarter, select 10-15 keywords (~1-2/week) related to the assigned or recommended readings, weekly themes, and/or class discussions. Post brief (300-500 word) entries to the shared Keywords document no later than **9pm on Monday evening** before class. You are welcome to expand on previous entries as well as add new ones.

3) Analytic Paper & Presentation (40%)

Identify an artifact (broadly defined) related to the study of medicine, science, and technology. This may be an image, sound, device, space, etc. I encourage you to choose an artifact related to your planned thesis research.

Drawing on course themes and approaches, submit a 10-12 page theoretical analysis of this artifact and its social, cultural, or political significance.

In addition, each student will deliver, in a manner appropriate for a professional meeting, a 15-minute oral presentation on his or her artifact.

COURSE SCHEDULE

The following readings are required. Additional recommended readings will be listed on the course website.

Week 1, September 29 Introductions, Genealogies, and Orientations

Franklin, Sarah. 1995. "Science as Culture, Cultures of Science." *Annual Review of Anthropology* 24:163-184.

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

Fujimura, Joan. 1998. "Authorizing Knowledge in Science and Anthropology." *American Anthropologist* 100(2):347-360.

Week 2, October 6 Paradigm Shifts: Science as Culture and Practice

Weber, Max. 1946. "Science as a Vocation." In *Max Weber: Essays in Sociology*. Gerth and Mills, trans. Oxford: Oxford University Press. Pgs. 129-156.

Merton, Robert. 1973 (1942). "The Normative Structure of Science." *The Sociology of Science*. Norman W. Storer, ed. Chicago: University of Chicago Press. Pgs. 267-278.

Fleck, Ludwik. 1979 (1935). *Genesis and Development of a Scientific Fact*. F. Bradley and T. Trenn, trans. Chicago: University of Chicago Press. Prologue and pgs. 1-51.

Kuhn, Thomas. 1996 (1962). "The Nature and Necessity of Scientific Revolutions." *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press. Pgs. 92-110.

Week 3, October 13 Producing Knowledge: Facts, Laboratories, and Practices

Poovey, Mary. 1998. "Accommodating Merchants: Double Entry Book Keeping, Mercantile Expertise, and the Effect of Accuracy." In *A History of the Modern Fact: Problems of Knowledge in the Sciences of Wealth and Society*. Chicago: University of Chicago Press. Pgs. 29-91.

Hans-Jorg Rheinberger. 1997. *Toward a History of Epistemic Things: Synthesizing Proteins in the Test Tube*. Stanford: Stanford University Press. Selections.

Bruno Latour and Steve Woolgar. 1986. *Laboratory Life: The Construction of Scientific Facts*. Princeton University Press. Pgs. 105-150.

Week 4, October 20 From Networks To Assemblages

Shapin, Steven. 1988. "The House of Experiment in Seventeenth-Century England." In *The Science Studies Reader*. Mario Biagioli, ed. NY: Routledge, 1999, pgs. 479-504.

Latour, Bruno. 1983. "Give Me a Laboratory and I Will Raise the World." In *Science Observed: Perspectives on the Social Study of Science*. Karin Knorr-Cetina, and Michael Mulkay, eds. Beverly Hills, CA: Sage Publications. Pgs. 141-170.

Callon, Michel. 1987. "Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St. Brieuc Bay." In *Power, Action and Belief: A New Sociology of Knowledge?* John Law, ed. London: Routledge. Pgs. 196-229.

Collier, Stephan J. and Aihwa Ong. 2005. "Global Assemblages, Anthropological Problems." In *Global Assemblages: Technology, Politics, and Ethics as Anthropological Problems*. Pgs. 3-21.

COURSE SCHEDULE, cont.

Week 5, October 27 **Feminist and Antiracist Critiques**

Haraway, Donna. 1991. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." In *Simians, Cyborgs, and Women*. NY: Routledge. Pgs. 183-202.

Harding, Sandra. 1991. *Whose Science, Whose Knowledge? Thinking from Women's Lives*. Ithaca, NY: Cornell University Press. Selections.

Stepan, Nancy Leys and Sander L. Gilman. 1993. "Appropriating the Idioms of Science: The Rejection of Scientific Racism." In *The "Racial" Economy of Science: Toward a Democratic Future*. Sandra Harding, ed. Bloomington, IN: Indiana University Press. Pgs. 170-193.

Hammonds, Evelyne M. 1997. "New Technologies of Race." In *Processed Lives: Gender and Technology in Everyday Life*. Jennifer Terry and Melodie Calvert, eds. NY: Routledge.

Week 6, November 3 **Global Science**

Anderson, Warwick. 2002. "Introduction: Postcolonial Technoscience." *Social Studies of Science* 32(5/6):643-658.

Hecht, Gabrielle. 2002. "Rupture Talk in the Nuclear Age: Conjugating Colonial Power in Africa." *Social Studies of Science* 32(5/6):691-727.

Adams, Vincanne et al. 2010. "A Tibetan Way of Science: Revisioning Biomedicine as Tibetan Practice." In *Medicine Between Science and Religion*. Adams, Schrempf, and Craig, eds. Pgs. 102-126.

Petryna, Adriana. 2009. *When Experiments Travel: Clinical Trials and the Global Search for Human Subjects*. Princeton: Princeton University Press. Selections.

Week 7, November 10 **Multiple Knowledges: Experts and Publics**

Epstein, Steven. 1995. "The Construction of Lay Expertise: AIDS Activism and the Forging of Credibility in the Reform of Clinical Trials." *Science, Technology, and Human Values* 20(4):408-437.

Collins, Harry and Robert Evans. 2002. "The Third Wave of Science Studies: Studies of Expertise and Experience." *Social Studies of Science* 32(2):235-296.

Locke, Simon. 2002. "Sociology and the Public Understanding of Science: From Rationalization to Rhetoric." *British Journal of Sociology* 52(1):1-18.

Callison, Candis. 2014. *How Climate Change Comes to Matter*. Durham: Duke University Press. Selections.

COURSE SCHEDULE, cont.

Week 8, November 17 Making Technology

Marx, Karl. "The Machine versus the Worker." In *The Social Shaping of Technology*. 2nd edition. Donald MacKenzie and Judy Wajcman, eds. Pgs. 156-157.

Pinch, Trevor. 1996. "The Social Construction of Technology: A Review." In *Technological Change: Methods and Themes in the History of Technology*. Robert Fox, ed. Pgs. 17-35.

Jain, Sarah. 1999. "The Prosthetic Imagination: Enabling and Disabling the Prosthesis Trope." *Science, Technology and Human Values* 24: 31-54.

Coleman, Gabriella. 2010. "Ethnographic Approaches to Digital Media". *Annual Review of Anthropology* 39:487–505.

Week 9, November 24 Life Itself: Bioscience, Biosociality, and Biopolitics

Helmreich, Stefan. 2003. "Trees and Seas of Information: Alien Kinship and the Biopolitics of Gene Transfer in Marine Biology and Biotechnology." *American Ethnologist* 30:341-359.

Landecker, Hannah. *Culturing Life: How Cells Became Technologies*. Cambridge: Harvard University Press. Selections.

Roberts, Elizabeth. 2008. "Biology, Sociality, and Reproductive Modernity in Ecuadorian In Vitro Fertilization." In *Making Biosociality: Biologies and Identities in Formation*. Gibbon and Novas, eds. NY: Routledge.

Nelson, Alondra. 2008. "Bio Science: Genetic Genealogy Testing and the Pursuit of African Ancestry." *Social Studies of Science* 38:5: 759-783.

Week 10, December 1 Presentations and Papers Due