Course Overview
In recent decades, sociocultural anthropologists have taken the ethnographic methods they developed for studying exotic peoples in exotic locales and applied them to scientific communities and practice. Anthropology has become one of many disciplines contributing to and drawing from the interdisciplinary field of science and technology studies (STS). This course provides an introduction to STS, and focuses on two questions germane to the relation between STS and anthropology. First, how do recent developments in biotechnology upset boundaries between nature and culture, systems of classification, and notions of kinship? Second, how can STS engage with postcolonial conditions and both hybrid and radically other forms of knowledge?

Requirements
This class will be run as a graduate-level reading-intensive research seminar. Preparation for class discussion by careful reading of the week's readings is required. This seminar relies upon the participants' capacity to participate in a fruitful discussion in the seminar meeting. This means that each student should be familiar with the central arguments of the required readings, and be able to develop thoughts on the connections/disconnections in the larger body of readings for the week and across the term.

Additionally, each student will be expected to:

1) **Prepare a one page critical commentary** on the week’s readings to be circulated electronically via iLearn by 1 PM on the Tuesday before each class. In iLearn, click on Weekly Commentaries > Week # > Create Blog Entry. These are meant to jump-start discussion, to flag critical issues and concerns, and to highlight any crosscutting themes or connections that you may want to bring in. They should be intelligible but need not be formal or incredibly polished.

2) **Co-lead/co-chair at least one class discussion.** (The exact number will depend on the number of students in the class). This involves three things: 1) a short (<15 minute) presentation of the key arguments made in the readings pertaining to that week; 2) using other materials to locate them in one or more debates or to show something of their intellectual genealogy; 3) leading the class discussion on the readings. Again, the presentation should be no more than fifteen minutes.

3) **Write.** There are two options for the writing component of this course. I have no preference for either choice; I expect you to choose the option that is more useful to you at the current stage of your graduate career.

Option one: Two papers of 7 to 10 pages, in which you develop your thoughts and/or reading commentaries into well-crafted and concise analyses that relate readings to each
other within a given week or across sessions. You may submit the papers at any point during the term; however, you should submit the first one by week seven, and the second by Friday of the last week of classes.

Option two: submit a paper or research proposal of 15-25 pages, by 10 AM Wednesday December 7. Papers or proposals should use readings from the class (probably in theoretical, contextual or comparative sections) to engage with your dissertation topic or a closely-related area.

Auditors
Auditors are welcome in this class on two conditions: they need to come to most (preferably all) of the classes and they should be prepared to do all the readings and fulfill qualification (i) above, i.e. prepare a weekly commentary. Auditors can add a great deal to the discussion in the class but only if they prepare in the same way as students taking the class for credit.

Grading
Participation (including commentaries and discussion leading): 50%
Paper(s) : 50%

Required Texts
Sergio Sismondo, An Introduction to Science and Technology Studies
Bruno Latour, Science in Action: How to Follow Scientists and Engineers through Society
Robert Kohler, Landscapes and Labscapes: Exploring the Lab-Field Border in Biology
Stefan Helmreich, Alien Ocean: Anthropological Voyages in Microbial Seas
Sarah Franklin, Dolly Mixtures: the Remaking of Genealogy
Sheila Jasanoff, Designs on Nature: Science and Democracy in Europe and the United States
Marilyn Strathern, Kinship, Law and the Unexpected: Relatives Are Always a Surprise
David Turnbull, Masons, Tricksters, and Cartographers: Comparative Studies in the Sociology of Scientific and Indigenous Knowledge
Helen Verran, Science and an African Logic
Gyan Prakash, Another Reason: Science and the Imagination of Modern India

Besides these books, there will be several articles and/or book chapters assigned most weeks, distributed via iLearn.
Class Schedule

Week One - 9/28 - An Introduction to Science and Technology Studies

Required Readings
Sismondo chapters 1-3, 5, 6, 10
Latour, B. and Woolgar, S.

Optional Readings
Early STS
Merton, R. K.
Bloor, D.
Kuhn, T. S.
S. Turner
Shapin, S., Schaffer, S., and others
Latour, B.
See also the literature reviews in Latour and Woolgar 1986 above and Bourdieu 2004 below.

Anthropological Precedents
Bloor, D.
Evans-Pritchard, E. E.
Horton, R.
Horton, R.
Malinowski, B.
Some Philosophical Underpinnings
Popper, K. R.
Wittgenstein, L.
Berger, P. and Luckmann, T.
Hacking, I.
1999 The social construction of what?. Cambridge, MA: Harvard Univ Pr.

A Critical Reading of the History of STS
Bourdieu, P.

Week Two - 10/5 - Actor-Network Theory, and Some Critiques

Required Readings
Callon, M.
Latour, Science in Action — remainder
Singleton, V. and Michael, M.
Sismondo, ch. 8 and 7
Haraway, D. J. and Randolph, L. M.

Optional Readings

The literature on Actor-Network Theory is vast. John Law’s web page at http://www.lancs.ac.uk/fass/centres/css/ant/antres.htm contains a useful guide to and annotated bibliography of the literature through 2004. A useful recent critical review can be found in Braun, B.

Gender and Science
Lederman, M. and Bartsch, I.
Carolyn Merchant
Schiebinger, L.
1991  *The mind has no sex?: women in the origins of modern science*. Cambridge: Harvard Univ Pr.
Harding, S. G.
Haraway, D. J.
Haraway, D. J.

In addition, work on gender and reproductive technologies was (and remains) particular prominent in early anthropological work on science. See the review in Franklin, S. 1995. Science as Culture, Cultures of Science. *Annual Review of Anthropology* 24(1):163-184.

### Week Three - 10/12 - Moving outside the Laboratory

**Required Readings**

Henke, C. R.

Sismondo chs. 14

Robert Kohler, *Landscapes and Labscapes: Exploring the Lab-Field Border in Biology*

Lorimer, J.

**Optional Readings**

Latour, B.

Scott, J.

Cori Hayden

Jacobs, N. J.

Doing, P.

Schumaker, L.
Bank, L.  

Bank, A.  

**Week Four - 10/19 - Life Itself, and Professional Lives**

**Required Readings**

Sismondo ch. 4

Van Reybrouck, D. and Jacobs, D.  

Stefan Helmreich, *Alien Ocean: Anthropological Voyages in Microbial Seas*

Hercock, M.  

**Optional Readings**

Latour, B.  

Foucault, M.  

Foucault, M., Senellart, M., and Davidson, A. I.  

Foucault, M.  

Agamben, G. and Raiola, M.  
Week Five - 10/26 - Biotechnology and Multispecies Ethnography

**Required Readings**
Sarah Franklin, *Dolly Mixtures: the Remaking of Genealogy*
Kirksey, S. and Helmreich, S.
Kosek, J.

**Optional Readings**
There is a burgeoning literature in animal studies and multispecies ethnography; for a useful sampling see Laura Ogden’s syllabus at http://gss.fiu.edu/uploads/file/SYA%204011%20Ogden(1).pdf

Week Six - 11/2 - Political Culture and Co-Production

**Required Readings**
Sheila Jasanoff, *Designs on Nature: Science and Democracy in Europe and the United States* Sismondo ch. 15-17
Satterfield, T. and Roberts, M.

**Optional Readings**
Thompson, C.

Week Seven - 11/9 - Biotechnology, Kinship and Relation

**Required Readings**
Marilyn Strathern, *Kinship, Law and the Unexpected: Relatives Are Always a Surprise*

**Optional Readings**
Exploring the thought and impact of Marilyn Strathern could be the subject of a graduate seminar in itself. For an example with many related readings see the syllabus from Cory Hayden’s UC Berkeley graduate seminar “Ethnographies of Relation,” on the course iLearn site. And if you haven’t seen it, watch *Ongka’s Big Moka.*
Week Eight - Science and the (Post)colony

DATE AND TIME TO BE DETERMINED

Required Readings
Gyan Prakash, *Another Reason: Science and the Imagination of Modern India*
Lowe, C.
Beinart, W., Brown, K., and Gilfoyle, D.

Optional Readings
Works reviewed in Beinart et al. 2009.
Visvanathan, Shiv
Abraham, Itty
Anderson, W.
**Week Nine - 11/23 - Science and Technology**

**Required Readings**
- De Laet, M. and Mol, A.
- Sismondo, ch. 9

**Optional Readings**
- Latour, B.
- Lemonnier P.
- Horst H. and Miller D., 2006
- Pfaffenberger B.

**Week Ten - 11/30 - Mathematics, Language and Relativism**

**Required Readings**
- Whorf, B.
- Nadasdy, P.
- Helen Verran, *Science and an African Logic*