Anthropology 455/655: Introduction to Science and Technology Studies

Spring 2004
Room SH560
Wednesday 2-5

Instructors:
• Christopher Kelty ckelty@rice.edu, SH580

Introduction:
This class is an introduction to the field of “Science and Technology Studies.” The premise of this class is that science and technology are an integral part of contemporary societies—just as culture, politics and economics are built into contemporary science. Science, technology and society may therefore be analyzed together, using methods and theories of the social sciences and humanities. Students will be introduced to the fundamentals of this interdisciplinary field by reading research and theoretical works drawn from anthropology, history, sociology and philosophy; some of the major innovations in the field will be studied in depth. The class will simultaneously analyze examples and problems that illustrate how to apply these works to the contemporary world. Examples will span a wide range of disciplines from computer science to biomedicine, but no prior scientific knowledge or technical expertise is assumed. The goal is for students to become skilled at analyzing science and technology from a social and cultural standpoint, and to cross some of the assumed and traditional boundaries between scientists, humanists and social scientists.

Open to advanced undergraduates and graduate students.

Requirements: Students are required to attend all classes, complete all reading assignments, and participate in discussion. Each student will be responsible for presenting on some portion of the readings and responding to those presented by others.

Required Texts (at the Bookstore):
1 Society in Science

- Jan. 14 Introduction
  Case study, Intro.

- Jan. 21: Science Made and Science in the Making
  **Required:**
  
  **Additional/Supplementary:**

- Jan. 28: Actor Network Theory and Beyond
  **Required:**
  Annemarie Mol *The Body Multiple*
  
  **Additional/Supplementary:**
  http://www.comp.lancs.ac.uk/sociology/ant.html

2 Science in Society

- Feb. 4: Risks, expertise and credibility. Iceland as Example.
  **Required:**
  
  **Additional/Supplementary:**
  Journals: *Social Studies of Science, Science Technology and Human Values, New Genetics and Society*
3 Technology in Science

- Feb 11: The three technologies of science and politics
  
  **Required:**
  
  **Additional/Supplementary:**

- Feb. 18 Literary Technologies I (representation)
  
  **Required:**

  **Additional/Supplementary:**

  **Journals:** *Science in Context, Critical Inquiry, Common Knowledge, Studies in the History and Philosophy of Science, Representations,*

- Feb. 25 Literary Technologies II (narrative)
  
  **Required:**

  **Additional/Supplementary:**

Journal: *Configurations, Grey Room*


- March 10. Social Technologies

  **Required:**
  
  
  

**Additional/Supplementary:**


- Mar 17: Material Technologies

  **Required:**


**Additional/Supplementary:**


4 Order and Disorder

- March 24. Science and Political-Economic Orders
  **Required:**
  1. Shapin and Schaffer, *Leviathan and the Air Pump*. chs. 3 and 7-8. (Chapter 4 optional).
  **Optional:**

- March 31: “Calculative Agencies:” An approach to studying markets and economists

- April 7: Studies of Finance as Science Studies/Anthropology

- April 14: Case Study – bioprospecting in Mexico
  **Required:**
  Cori Hayden *When Nature Goes Public*

- April 21 Cont’d/Conclusion

**Other Important Information:**
Incompletes are not given.

Honor Code issues: For the assignments, group investigation and research is encouraged, but each assignment handed in must be the student’s own original work. In the case of group assignments, division of labor will be up to the students, and any necessary honor code guidelines will be provided.
Any student with a documented disability needing academic adjustments or accommodations is requested to speak with the instructor during the first two weeks of class. All discussions will remain confidential. Students with disabilities will need to also contact Disability Support Services in the Ley Student Center.