The New Life Sciences:  
Emerging Technologies, Emerging Politics

Course description

The new life sciences (including genetics, genomics, biotechnology, cell biology, and contemporary biomedical and agricultural research) are highly controversial areas of emerging science and technology. They inspire both hope and anxiety, and are a source of ongoing conflicts. This course will examine the politics of the new biology, both to consider the issues in their own right and to examine the relationships among science, technology, and politics. In particular, the course will focus on three themes – the politics of identity, the politics of property, and the politics of risk – as they pertain to the emerging technologies of life. Topics may include the social shaping of biological research; eugenics and genetics; genomic medicine; risk; commercial biotechnology; university-industry relationships; social movements; North-South issues; the Human Genome Project; genetics and race; intellectual property; the debate over human cloning; and the capacity of contemporary societies to manage emerging technologies. A particular focus of the course in 2006 will be critically examining the role of bioethics as a form of regulatory machinery in addressing the politics of emerging biomedical technologies.

Prerequisites

This course is open to graduate students; seniors will only be permitted with permission of the instructor.

Required readings are available in Olin 405 or online through the Cornell Libraries.

EVALUATION

The final grade will be determined as follows:

- Class Participation 30%
- Paper 70%

Participation: Students are expected to attend all classes, with readings prepared, and to participate actively in discussion.

Paper: 15 to 25 pages (double spaced) addressing a topic relevant to the course is due December 15. A one-page description of the paper topic, along with a short, illustrative list of works to be cited, is due no later than October 31. Late papers cannot be accepted. If an incomplete is taken, all work must be submitted by January 15, 2007.
READING ASSIGNMENTS

Aug. 29   Introductory meeting

Sept. 5   Science, Expertise, Democracy

- Beck, Ulrich, Risk Society: Towards a New Modernity (Sage, 1992), pp. 1-84.
- Additional recommended reading:
  - Guston, David H., Between Politics and Science: Assuring the Integrity and Productivity of Research (Cambridge University Press, 2000).

Sept. 12  Constituting Futures

- Jasanoff, Designs, pp. 94-145.

Sept. 19  Bioethical Visions 1


Sept. 26  Bioethical Visions 2


Oct. 3  Bioethics in Social Context

Oct. 10  No class (Fall Break)
• But begin reading for the week of Oct. 17.

Oct. 17  Patients, Activists, Citizens
• Dumit, Joseph, “Illnesses you have to fight to get: facts as forces in uncertain, emergent illnesses,” Social Science & Medicine, Vol. 62, 2006, pp. 577–590. (online)

Oct. 24  Eugenics
• Kevles, Daniel J., In the Name of Eugenics (Harvard University Press, 1985), pp. 96-128.

Oct. 31  Race
- Case study: The BiDil debate (all sources online)
  - Puckrein, Gary and Clyde W. Yancy, “BiDil’s impact” (letter to the editor), Nature Biotechnology 23 (11), November 2005, 1343.

Nov. 7  Reproductive Technologies
- Thompson, Charis, Making Parents: The Ontological Choreography of Reproductive Technologies (MIT Press, 2005), pp. 55-204.

Nov. 14  Ownership Regimes
- Boyle, James, “Enclosing the genome: what the squabbles over genetic patents could teach us,” Draft available under a Creative Commons License (online): http://www.creativecommons.org/licenses/by-sa/1.0
- Rose, Hilary, The Commodification of Bioinformation: The Icelandic Health Sector Database, final report to the Wellcome Charitable Trust, 2001, pp. 1-35. (online)

Nov. 21  Pharmaceutical Economies

Nov. 28 Reflections, Conclusions, Research Agendas
• Jasanoff, Designs, pp. 247-291.