

SCIENCE AND SOCIETY

Comparative Studies 272
Spring 2002

Professor David Horn

Class meetings: Tuesday and Thursday, 11:30-1:18, Smith 1048
Office Hours: Wednesday 11:30-1:18 or by appointment, 308 Dulles Hall.
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I. Course Description

This course explores, from a variety of perspectives, the multiple relations among social and cultural formations, scientific work, and the production and circulation of knowledge. Topics include the everyday life of the laboratory; the shifting boundaries of science, politics, and religion; the roles of narrative and metaphor in scientific theorizing; and the social and ethical contours of scientific research.

Class meetings will be devoted to careful consideration of texts, films, and videos. It is therefore essential that you complete reading assignments before coming to class, attend all screenings, and be prepared to ask questions and contribute to discussions. Class time will be divided between lectures, small-group discussions, and class discussions. You will be graded on the basis of your attendance and participation in class (10%), and on the basis of your performance on two in-class midterm exams (30% and 30%) and a 6-8 page final paper (30%). Midterm exams will combine short answer/identification and essay questions; guidelines for the paper will be discussed in class. Please note that late work may not be evaluated.

II. Texts (Available at SBX)

Philip Appleman, ed., *Darwin (Norton Critical Edition)*, 3rd ed. (Norton, 2000)

Aldous Huxley, *Brave New World* (Harper Perennial, 1998 [1932])

Sharon Traweek, *Beamtimes and Lifetimes: The World of High Energy Physicists* (Harvard University Press, 1988)

James D. Watson, *The Double Helix: A Personal Account of the Discovery of the Structure of DNA* (NAL, 1968)

Electronic Reserve (texts marked with an asterisk): to access, visit OSCAR webpage (<http://library.ohio-state.edu/screens/opacmenu.html>), and click on Course Reserves. You will be asked to enter your name and id number to read or print texts.

III. Schedule of Readings

A. Science/Society

- 2 April Introductions
- 4 April Bruno Latour, "Opening Pandora's Black Box," *Science in Action*, pp. 1-17 (handout)

B. Science/Worldview

- 9 April * Thomas Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1962), pp. 111-135
- 11 April * Galileo Galilei, "The Starry Messenger" (1610), *Discoveries and Opinions of Galileo*, ed. Stillman Drake (New York: Anchor, 1957), pp. 21-58

C. Science/Religion

- 16 April Film: *Inherit the Wind*, Stanley Kramer (Warner, 1960)
- 18 April Charles Darwin, *Origins of Species* (1859), selections

D. Science/Politics

- 23 April Charles Darwin, *Descent of Man*, selections
- * Robert Proctor, "The Destruction of 'Lives Not Worth Living,'" in *Deviant Bodies*, ed. Jennifer Terry and Jacqueline Urla (Bloomington: Indiana University Press, 1996), pp. 170-196
- 25 April Film: *Day After Trinity: J. Robert Oppenheimer and the Atomic Bomb*, Jon Else (Pyramid, 1981)

E. Science/Culture

- 30 April Sharon Traweek, *Beamtimes and Lifetimes*
- 2 May MIDTERM

F. Science/Gender

- 7 May *Londa Schiebinger, "Skeletons in the Closet: The First Illustrations of the Female Skeleton in 18th-Century Anatomy," *Representations* 14 (1986):

42-82

- 9 May *Emily Martin, "The Egg and the Sperm: How Science Has Constructed a Romance Based on Stereotypical Male-Female Roles," *Signs* 16 (1991): 485-501

Video: *The Miracle of Life*, Lennart Nilsson (Swedish Television/WGBH Boston, 1983)

G. Science/Ethics

- 14 May James Watson, *The Double Helix*

- 16 May *Evelyn Fox Keller, "Nature, Nurture and the Human Genome Project," in *The Code of Codes*, pp. 281-299, 355-357

Video: *Decoding the Book of Life*, Jon Palfreman (NOVA/Coronet, 1989)

- 21 May MIDTERM

H. Science/Fiction

- 23 May Aldous Huxley, *Brave New World*, "Foreword" and Chapters 1-8

- 28 May *Gattaca*, Andrew Niccol (Columbia TriStar, 1997)

- 30 May No class

I. Science/Citizenship

- 4 June Aldous Huxley, *Brave New World*, Chapters 9-18. Graduating seniors:
FINAL PAPER DUE

- 6 June Summary and Evaluations.

- 10 June FINAL PAPER DUE

