

ESPM 162, “BIOETHICS AND SOCIETY”
SPRING 2007 (T – TH 3:30 – 5)
159 MULFORD

INSTRUCTOR

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COURSE OVERVIEW

Developments in biotechnology and the life sciences have thrown into question existing policy approaches and instruments dealing with intellectual property, reproduction, health, informed consent and privacy. Rapid changes in science and technology appear to be reconstituting concepts of the self and its boundaries, kinship, ownership, and legal rights and obligations of people in relation to their governing institutions. Through reading primary materials and relevant secondary sources, this course seeks to identify and explore salient ethical, legal, and policy issues—and possible solutions—associated with these developments.

REQUIRED BOOKS

Available at the Cal Student Store

- Aldous Huxley, *Brave New World* (HarperCollins, 2005)
- Stephen Jay Gould, *The Mismeasure of Man*, 2nd Ed. (New York: Norton, 1996)
- Richard Lewontin, *It Ain't Necessarily So: The Dream of the Human Genome and Other Illusions*, 2nd edition (NY, NY: New York Review of Books, 2001). [**abbreviated below as Lewontin**]

REQUIRED COURSE READER:

Available at Ned's Bookstore on Bancroft or online at www.odinreaders.com
You are responsible for printing out and bringing to class all online materials

***** **Always bring covered readings to lectures and sections as you will need them** *****

**** All books and readers are available on short-term reserve at the Bioscience Library in the Valley Life Sciences Building**

ASSIGNMENTS AND WEIGHTING

10% Participation (section and lecture) – Attendance at lectures and sections is mandatory
15% Section assignments
25% Essay
25% Mid-term examination (probably take home)
25% Final examination (probably take home)

Section assignments: Most weeks you'll have a short (1 page) assignment to complete. These assignments will be handed out in section and due the following week, also in section.

ACADEMIC HONESTY

Honesty is expected in ALL dealings with this class. The Berkeley Code of Student Conduct can be found at <http://students.berkeley.edu/uga/conduct.asp> and will be strictly enforced.

***** You should reread the Berkeley Code of Student Conduct before taking this class *****

LECTURE # DATE	COURSE SECTIONS <ul style="list-style-type: none"> • LECTURE TITLE • READINGS
COURSE INTRODUCTION	
1. Jan 16	<i>Brave New World</i>
Part I. HUMAN GENOME PROJECTS: PAST AND FUTURE	
2. Jan 18	<u>Genome Projects I: Holy Grail or Forbidden Knowledge?</u> Lewontin, Ch. 5, "The Dream of the Human Genome," 133-196. <i>Suggested:</i> Roger Shattuck, <i>Forbidden Knowledge: From Prometheus to Pornography</i> (1996), Ch. 3, "Faust and Frankenstein," pp. 77-100
3. Jan 23	<u>Genome Projects II: Genetic "Enhancement"</u> Gregory Stock, <i>Redesigning Humans: Our Inevitable Genetic Future</i> (2002), Ch. 1, 1-18, Michael J. Sandel, "The Case Against Perfection," <i>Atlantic Monthly</i> , Apr 2004. Visit:

	<p>http://www.transhumanism.org/index.php/WTA/index/</p> <p><i>Suggested:</i> Stock, Ch. 7, 124-152</p>
4. Jan 25	<p><u>Genome Projects III: Eugenics</u></p> <p>Gould <i>The Mismeasure of Man</i>,</p> <ul style="list-style-type: none"> • Ch. 5 (“The Hereditarian Theory of IQ: An American Invention”), pp. 176-204. <p><i>Genetics: Ethics, Law and Policy</i> [in reader, hereinafter GELP], (“Eugenics Programs in the United States”), pp. 42-48</p>
<p>Part II. NATURES</p>	
5. Jan 30	<p><u>Ontology and Nature</u></p> <p>Raymond Williams, “Nature” in <i>Keywords</i></p> <p>Aristotle, <i>Metaphysics</i> (excerpt)</p> <p>St. Thomas Aquinas, <i>Summa Theologica</i>, Question 91, “Of the Various Kinds of Law.”</p> <p>Fritjof Capra, <i>The Tao of Physics</i>, excerpt</p>
6. Feb 1	<p><u>Nature of individual human self: New Genetic Understandings</u></p> <p>Lewontin, Ch.1, “The Inferiority Complex”, 1-40.</p>
7. Feb 6	<p><u>Boundaries of Nature</u></p> <p>William Cronon, “The Trouble With Wilderness; or, Getting Back to Wrong Nature”</p> <p>Michel Foucault, Preface to <i>Order of Things</i></p>
8. Feb 8	<p><u>Human Groups and Classification</u></p> <p>G.C. Bowker and S.L. Star, <i>Sorting Things Out: Classification and Its Consequences</i> (2000), Ch. 6 (“The Case of Race Classification and Reclassification Under Apartheid”), pp. 195-225.</p>

	<p>Issa, “Ethical Perspectives on Pharmacogenomic Profiling in the Drug Development Process,” <i>Nature Reviews</i> Vol. 1 300-308 (April 2002), available at www.hctp.utoronto.ca/Pdf/Technology%20Course%20Readings/ethicalperspectives.pdf></p>
<p>Part III. KNOWLEDGES</p>	
<p>9. Feb 13</p>	<p><u>From Natural Philosophy to Science</u></p> <p>Aristotle, <i>Metaphysics</i>, Bk. I</p> <p>Raymond Williams, from <i>Keywords</i>, “Science,” pp. 276-80</p> <p>Carolyn Merchant, <i>Death of Nature</i>: 164-215</p>
<p>10. Feb 15</p>	<p><u>Film Screening: GATTACA (starring Uuuuma and Ethan Hawke)</u></p> <p>Francis Bacon, <i>New Atlantis</i></p>
<p>11. Feb 20</p>	<p><u>Science, Society, and Objectivity</u></p> <p>Gould, <i>The Mismeasure of Man</i>:</p> <ul style="list-style-type: none"> • Ch. 3 (“Measuring Heads”), pp. 105-114, 140-142; • Ch. 6 (“The Real Error of Cyril Burt: Factor Analysis and the Reification of Intelligence”), pp. 264-285, 303-326, 347-350. • Ch. 7 (“A Positive Conclusion”), pp. 351-366. <p><i>Suggested:</i> Weber, “Science as Vocation,” at http://www2.pfeiffer.edu/~lridener/DSS/Weber/scivoc.html</p> <p>Lorraine Daston, “Objectivity and the Escape from Perspective,” <i>Social Studies of Science</i>, vol.22 (1992), 597-618.</p>
<p>12. Feb 22</p>	<p><u>Sociologies of Science</u></p> <p>R.K. Merton, “The Normative Structure of Science,” pp. 267-278.</p> <p>Kuhn, <i>Structure of Scientific Revolutions</i>, pp. 35-65.</p> <p>ESSAY DRAFT DUE</p>

13. Feb 27	<p><u>Epistemology</u></p> <p>N. Goodman, <i>Ways of Worldmaking</i> (1978), Ch. 1 (“Words, Works, Worlds”) pp. 1-22.</p>
<p>Part IV. ETHICS</p>	
14. Mar 1	<p><u>Ethics, Action and the Individual:</u></p> <p>Rabinow and Rose, eds., <i>The Essential Foucault</i>, “The Ethics of the Concern of the Self as a Practice of Freedom,” 25-42.</p> <p>Michel Eyquem De Montaigne, <i>Essays</i>, “That Our Actions Should be Judged by Our Intentions” [HANDOUT On bSPACE]</p> <p>R. Moses, “Mens Rea: Criminal Law and the Element of Intent” [HANDOUT On bSPACE]</p>
15. Mar 6	<p><u>Greek Ethics</u></p> <p>Warren Ashby, <i>A Comprehensive History of Western Ethics</i> (Amherst, NY: Prometheus Books, 1997), “Greek Ethics,” 25-80.</p>
16. Mar 8	<p><u>Eastern Ethics</u></p> <p>[readings available on bSpace]</p> <p>Alan Watts, <i>The Way of Zen</i> (Vintage Books: New York, 1989 [1957]): Ch. 1: “The Philosophy of the Tao” Ch. 2: “The Origins of Buddhism”</p> <p>Rev. Nyogen Senzaki, “What is Zen?”, in William Briggs, ed., <i>Anthology of Zen</i> (Grove Press: New York, 1961)</p>
17. Mar 13	<p><u>Rights versus Utility</u></p> <p>The US Declaration of Independence (excerpt)</p> <p>Declaration on the Rights of Man (excerpt)</p>

	Secondary material on Utilitarianism
18. Mar 15	<p><u>Origins of Biomedical Ethics: Nazi Experiments</u></p> <p>FINAL ESSAYS DUE IN CLASS, WITH FIRST DRAFT ATTACHED</p> <p>Explore material on Nuremberg Trial http://www.ushmm.org/research/doctors/index.html</p> <p>FROM THE INDICTMENT [from Trials of War Criminals before the Nuremberg Military Tribunals under Control Council Law No. 10. Nuremberg, October 1946–April 1949. Washington, D.C.: U.S. G.P.O, 1949–1953.]: http://www.ushmm.org/research/doctors/twoa.htm</p> <p>Nuremberg Code http://ohsr.od.nih.gov/guidelines/nuremberg.html</p> <p>Visit web site: enter the photo archive on Nazi experiments http://www.ushmm.org/wlc/en/</p>
19. Mar 20	<p><u>Modern Biomedical Ethics and its Principles</u></p> <p>TAKE-HOME MID-TERMS PASSED OUT IN CLASS</p> <p>Howard Wolinsky, “Steps Still Being Taken To Undo Damage of ‘America's Nuremberg,’” <i>Annals of Internal Medicine</i> 15 August 1997. [On bSPACE]</p> <p>Belmont Report http://ohsr.od.nih.gov/guidelines/belmont.html</p> <p><u>recommended:</u></p> <p>Appendix C: Current Oversight System: History and Description, National Bioethics Advisory Commission, in <i>Ethical and Policy Issues in Research Involving Human Participants</i>, 151-167 http://www.georgetown.edu/research/nrcbl/nbac/human/overvol1.pdf</p>
20. Mar 22	<p><u>Land Ethics</u></p> <p>“The Land Ethic” By Aldo Leopold, from <i>A Sand County Almanac</i>, 1948</p> <p>http://home.btconnect.com/tipiglen/landethic.html</p>

	<p>Suggested:</p> <p>Strachan Donnelley, "Natural Responsibilities: Philosophy, Biology, and Ethics in Ernst Mayr and Hans Jonas," <i>Hastings Center Report</i> 32, no. 4 (2002): 36-43.</p>
<p>SPRING BREAK</p>	
<p>Part V. POLITICS</p> <p>The embryo, stem cells, recombinant DNA, Knowledge politics</p>	
21. Apr 3	<p><u>Abortion Politics and Law</u></p> <p><i>Roe v. Wade</i> <i>Planned Parenthood v. Casey</i></p>
22. Apr 5	<p><u>Stem Cells and Money</u></p> <p>Rebecca Dresser, "Stem Cell Research: The Bigger Picture," <i>Perspectives in Biology and Medicine</i>, vol. 48, 2 (spring 2005):181-94.</p> <p>C. Bruck, "Hollywood Science: Should a Ballot Initiative Determine the Fate of Stem-Cell Research?," <i>The New Yorker</i> (18 October 2004) 62-82.</p> <p>Winickoff, "Governing stem cell research in California and the USA: towards a social infrastructure," <i>Trends in Biotechnology</i> 24, no. 9 (2006): 390-394.</p> <p><i>Take Home Mid-Term Due</i></p>
23. Apr 10	<p><u>rDNA Politics in the 1970s</u></p> <p>E. Mendelsohn, "Frankenstein at Harvard: The Public Politics of Recombinant DNA Research." in <i>Transformation and Tradition in the Sciences</i>, E. Mendelsohn, ed., (Cambridge: Cambridge University Press, 1984), 317-335.</p> <p>John H. Evans, Between Technocracy and Democratic Legitimation: A Proposed Compromise Position For Common Morality Public Bioethics, <i>Journal of Medicine and Philosophy</i>, 31:213-234 (2006)</p>
24. Apr 12	<p><u>Citizenship and Science</u></p>

	<p>S. Epstein, "The Construction of Lay Expertise: AIDS Activism and the Forging of Credibility in the Reform of Clinical Trials," 20:4 <i>Science, Technology, & Human Values</i> (Autumn 1995) 408-437.</p> <p>A. Stockdale and S. F. Terry, Ch.4, "Advocacy Groups and the New Genetics," in <i>The Double-Edged Helix: Social Implications of Genetics in A Diverse Society</i> (Baltimore: Johns Hopkins University Press, 2002), 80-101</p>
<p style="text-align: center;">Part VI. SPECIAL TOPICS IN BIOETHICS AND SOCIETY</p> <ul style="list-style-type: none"> • Race in the Age of Genetics, Genome and Nations, Food Ethics, World Trade Organization, GMOs, Non-human Rights?, International Justice 	
<p>25. Apr 17</p>	<p><u>Race I</u></p> <p>L. Cavalli-Sforza, Ch. 1, "Genes and History", in <i>Genes, People, and Languages</i> (Berkeley: UC Berkeley Press, 2000), 3-32.</p> <p>Racial Categories in the U.S. Census, 1790-2000 (table).</p> <p>J.E. Reardon, "The Human Genome Diversity Project: A Case Study in Co Production," <i>Social Studies of Science</i> 31 (2001), 357-388.</p> <p>The International HapMap Consortium, "Integrating ethics and science in the International HapMap Project," <i>Nature Genetics</i>, 5: 467-475. 2004.</p> <p>suggested:</p> <p>International HapMap Homepage, http://www.hapmap.org/</p>
<p>26. Apr 19</p>	<p><u>Race II</u></p> <p>R.M. Henig, "The Genome in Black and White (and Gray)," <i>The New York Times Magazine</i> (Oct. 10, 2004) 47-51.</p> <p>F. Collins, "What We Do and Don't Know About 'Race,' 'Ethnicity,' Genetics and Health at the Dawn of the Genome Era," 36:11 <i>Nature Genetics Supplement</i> S13-S15 (November 2004).</p> <p><i>Suggested:</i></p> <p>E.G. Burchard et al., "The Importance of Race and Ethnic Background in Biomedical Research and Clinical Practice," 348:12 <i>New England Journal of</i></p>

	<p>Medicine 1170-1175, available at http://content.nejm.org/cgi/content/full/348/12/1170</p>
27. Apr 24	<p><u>Property I</u></p> <p><i>Moore v. Regents</i></p> <p>Dorothy Nelkin & Lori Andrews, “Homo Economicus: Commercialization of Body Tissue in the Age of Biotechnology,” <i>Hastings Center Report</i> 30-39 (Sept-Oct 1998).</p>
28. Apr 26	<p><u>Property II</u></p> <p><i>Diamond v. Chakrabarty</i></p> <p>Daniel Kevles, “Patenting Life: A Historical Overview of Law, Interests, and Ethics,” Working Paper for Yale Legal Theory Workshop (2001).</p>
29. May 1	<p><u>Ethics of Food I: Food as a Sphere of Virtue</u></p> <p>From Gregory E. Pence, Ed., <i>The Ethics of Food: A Reader for the 21st Century</i> (Rowman & Littlefield: Lanham, 2002)</p> <ul style="list-style-type: none"> • Wendell Berry, “How We Grow Food Reflects Our Virtues and Vices,” pp. 5-25. • Ronald Bailey, “Dr. Strangelunch: Why We Should Learn to Love GM Food,” pp. 100-115. • Vandana Shiva, “Genetic Engineering and Food Security,” pp. 130-147. <p>Marion Nestle, “The Ethics of Food Choice” [excerpt from <i>Food Politics</i>] (3 pages)</p>
30. May 3	<p><u>Ethics of Food I: Biotech and Food</u></p> <p>Mikael Klintman, Arguments Surrounding Organic and Genetically Modified Food Labeling: A Few Comparisons, <i>Journal of Environmental Policy & Planning</i> 4: 247-259 (2002).</p> <p>Thomas Bernauer, <i>Genes, Trade, Regulation</i> (Princeton: Princeton University Press, 2003), pp. 22-65.</p> <p>Food First Policy Brief #12: Ten Reasons Why the Rockefeller and the Bill and</p>

	Melinda Gates Foundation's Alliance for Another Green Revolution Will Not Solve the Problems of Poverty and Hunger in Sub-Saharan Africa, Eric Holt-Gimenez, Miguel Altieri, Peter Rosset (October 2006).
31. May 8	<p><u>Expanding Bioethics: Rights for Non-humans?</u></p> <p><i>Hand out Take-home Final Exam</i></p> <p>C. Stone, "Should Trees Have Standing?" in <i>Southern California Law Review</i> 45 (1972): 450-501.</p>
May 15	<p>TAKE-HOME FINAL EXAM DUE</p> <p>5 pm, 115 Giannini Hall Drop Box</p>