

Comparative Studies 367.02:

## **Science and Technology in American Culture**

Alana Kumbier  
Summer 2004

Class meetings: Tuesday and Thursday 11:30- 1:18 p.m.  
Office hours: Thursdays 1:30-2:30 p.m. at the Wexner Center Café, or by appt.  
Office: Mendenhall 410  
Phone: 292-2559  
Email: Please use WebCT email

Course web site (WebCT): <http://class.osu.edu>

### **Course Description**

This course is designed to help you further develop critical thinking, writing and information literacy skills through the careful consideration and discussion of course texts, and through the completion of critical writing exercises and assignments. In meeting these objectives, we will survey provocative, significant sites in the field of cultural studies of science and technology, focusing on integrated analyses of the following issues:

- How are science and technology nationally, culturally, historically situated?
- How is scientific knowledge constructed? By whom? In what context(s)? How is this way of knowing legitimated?
- How have historians of science and cultural theorists evaluated American scientific practices and methodologies?
- How have citizens and expert-activists engaged in processes to democratize scientific research and environmental policies?
- What ethical and philosophical issues are intimately connected with emerging biotechnologies and popular reproductive technologies? What are the relationships between these technologies and our understanding of what it means to be human?

### **Course Objectives**

By the end of the quarter, successful students will demonstrate the ability to:

- Critically engage with texts (including those presented in class and those encountered in everyday life) and articulate thoughtful responses to these texts in writing and in class discussion.
- Compose effective theses. Students will apply invention strategies to develop theses, and will evaluate theses on the basis of depth, plausibility, and focus.
- Use textual evidence. This involves integrating other authors' arguments in their own work, and accurately representing and documenting other authors' work.

- Apply other basic principles of clear expository writing: defining unfamiliar terms, presenting arguments in a clear order, anticipating opposing arguments and explanations.
- Develop research strategies to support the composition of an academic research paper. These strategies include: identifying a research topic/focus of appropriate scope, using library resources and technologies to identify and locate resources, and evaluating the credibility of potential research resources in print and electronic media.

### **Requirements**

You are expected to come to class having completed the reading assignments for that day, and to be prepared for discussion. In order to participate in class discussions in a meaningful way, it is essential that you read each text closely and critically. *Some of the readings will be difficult – you may find that it’s valuable to read texts more than once, or to consult a dictionary (or locate a trustworthy dictionary online) to help define unfamiliar terms.*

Attendance (for the full duration of the class period) is mandatory for this class. I realize that there are reasons you may have to miss class, however. If you miss class or know you will miss class for an excusable reason (sickness, family emergency, etc.) please let me know via email and I will excuse your absence. If you miss more than one consecutive class, you will need to provide me with documentation substantiating your absence. Lateness is also unacceptable in this class; habitual lateness will result in the deduction of points from your participation grade. Because your participation and attendance (measured via in-class writing assignments, quizzes, and participation in large and small group discussion) are integral to your success in the course, they comprise 15% of the final grade.

Writing requirements:

- 3 short writing exercises, 1-2 pages each
- 4 reading/discussion response posts on WebCT (250-500 words; you choose the dates)
- A critical response paper, 4-5 pages (may be the revised, cumulative product of any of the 3 short writing exercises)
- A prospectus and annotated bibliography for your final research paper, 1-2 pages
- Final research paper, 8-10 pages

Final grade breakdown:

- Participation (including discussion, in-class writings, and focus group presentations): 15%
- 3 short exercises: 30% (10% each)
- 4 reading response posts on WebCT: 10%
- Critical response paper: 15%
- Prospectus/Annotated Bibliography: 10%
- Final paper: 20%

Guidelines for all assignments will be handed out and discussed in class. I will also be available to you during office hours (or by appointment) to help clarify any questions you may have about coursework. Late assignments will be docked one-third grade per day late before being evaluated. I will not accept assignments more than a week late unless prior arrangements have been made. Late final papers will not be accepted.

A note on plagiarism: All suspected instances of plagiarism will be reported to the University Committee on Academic Misconduct. For more information on what constitute plagiarism, see the Student Code of Conduct in the *Student Handbook*, and/or refer to the “Intellectual Property” chapter in *Everything’s an Argument*.

## Resources

Disability Accommodation: If you need an accommodation based on the impact of a disability or impairment, you should contact me to arrange an appointment as soon as possible. At this appointment we can discuss the course format, anticipate your needs, and explore potential strategies for accommodation. I will also consult with the Office for Disability Services for assistance in developing accommodation strategies. If you have not previously contacted the Office for Disability Services, I encourage you to do so.

Phone: 292-3307 / Web site: [www.ods.ohio-state.edu/](http://www.ods.ohio-state.edu/)

Conferences: Please let me know if you'd like to meet with me to discuss the course, our assignments, or any related issues. Please feel free to also contact me via email with any questions or concerns you may have.

Writing Center: The Writing Center operates free-of-charge as a resource to help anyone at the University. You may schedule one-hour appointments with the Writing Center staff members, who will assist students at any stage of the writing process.

Phone: 688-4291 / Web site: [www.cstw.ohio-state.edu/writing\\_center/index.htm](http://www.cstw.ohio-state.edu/writing_center/index.htm)

## Texts

Available at SBX Bookstore [check the OSU libraries, OhioLINK, or Columbus Metropolitan Library System to borrow books; try [half.com](http://half.com), [powells.com](http://powells.com), or [amazon.com](http://amazon.com) for used books]:

Allen, Barbara L. *Uneasy Alchemy: Citizens and Experts in Louisiana's Chemical Corridor*. Cambridge: MIT Press, 2003.

Davis-Floyd, Robbie and Joseph Dumit. *Cyborg Babies: From Techno-Sex to Techno-Tots*. New York: Routledge, 1998.

Elliott, Carl. *Better Than Well: American Medicine Meets the American Dream*. New York: W. W. Norton & Co., 2003.

Lunsford, Andrea A. and John J. Ruszkiewicz. *Everything's an Argument*. 3<sup>rd</sup> Ed. Boston: Bedford/St. Martin's, 2004. [Noted as EAN in schedule]

National Academy of Sciences. *On Being a Scientist: Responsible Conduct in Research*.

Other course readings are available on WebCT, and are noted as such on the schedule (these are the readings marked with an asterisk (\*)).

## Daily Schedule

Any changes to this schedule will be announced in class and via WebCT.

Week One

6.22 T Introduction to the course; syllabus review

6.24 R *Everything's An Argument* (EAN), ch. 1, 2

### Block One: Evaluating Scientific Practice

Week Two

6.29 T **Summarizing Exercise Due**  
\*Orwell, "What is Science?"  
National Academy of Science

7.1 R \*Gould, "American Polygeny and Craniometry Before Darwin"  
*Skim* EAN, ch. 7, through 117

Week Three

7.6 T **Quoting Exercise Due**  
\*Jones, "The Tuskegee Syphilis Experiment"

7.8 R \*Gould, "Buck v. Bell"  
*Skim* EAN ch. 10, through p. 194

Week Four

7.13 T **Thesis Exercise Due**  
Focus group presentations on sections of the Eugenics Archive:  
<http://www.eugenicsarchive.org>  
Group 1: Social Origins  
Group 2: Scientific Origins  
Group 3: Research Methods

7.15 R Group 4: Research Flaws  
Group 5: Marriage Laws  
Group 6: Immigration Laws

Week Five

7.20 T Peer Review of Critical Response Paper

7.22 R **Critical Response Paper Due**  
Library Instruction (Recommended: EAN, ch. 18)

### Block Two: Science and Democratic Practice

Week Six

7.27 T *Uneasy Alchemy*, Preface & ch. 1

7.29 R *Uneasy Alchemy*, ch. 2

Week Seven

8.3 T **Prospectus and annotated bibliography due**  
*Uneasy Alchemy*, ch. 5,6

### Block Three: Enhancing and Engineering Humanity

8.5 R *Cyborg Babies*, ch. 1, 3, 5 (Focus groups 1, 2 and 3 lead discussion; everyone

reads 2 of the 3 chapters)

Week Eight

8.10 T *Cyborg Babies*, ch. 7, 9, 10 (Focus groups 4, 5, and 6 lead discussion; everyone reads 2 of the 3 chapters)

8.12 R Screen: *Sound and Fury: The Communication Wars of the Deaf*

Week Nine

8.17 T *Better Than Well*, ch. 1, 2, 5

8.19 R *Better Than Well*, ch. 8, 9, 10 & Conclusion (Choose 2 -3 of the 4 readings)

Finals Week: Research papers due in my mailbox (in Dulles 308) on August 24, 2004 by 3 p.m.