

## WMNST 582



### Science and Technology in Women's Lives

Spring 2005  
T, Th 11:00 - 12:15 pm  
GMCS 306  
Schedule #35663

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#### Course Description

Science and Technology in Women's Lives introduces the student to the field of feminist science studies by examining the role of women in science, analyzing gendered science and learning about the feminist restructuring of science. This course also focuses on feminism and technoscience, dealing with topics such as cyborgs, patented life forms, reproductive technologies and genetic engineering.

#### Course Objectives

1. To learn about the contributions that women have made and continue to make in science and technology.
2. To learn feminist critiques of science and technology.
3. To develop the ability to construct your own feminist critiques of science and technology.
4. To appreciate the need for feminism to influence the creation of scientific knowledge.

#### Instructor Policies

**Office hours, appointments, and messages:** Please visit or call my office during my scheduled office hours. You can also contact me by phone or e-mail to make an appointment if you are unable to make the office hours.

**Assignments and Make-ups:** Assignments are always due at the beginning of class. Late assignments WILL NOT BE ACCEPTED. There is no exception to this rule without a valid explanation to me provided with the appropriate documentation. All assignments have to be typed, edited, and stapled.

There are NO MAKE-UPS unless you have made prior arrangements with me.

### **Required Texts**

The course reader is available at KB Books.

*Hypatia: A Journal of Feminist Philosophy*. *Feminist Science Studies*. 19(1).

*Signs: Journal of Women in Culture and Society*. *Gender and Science: New Issues* 28(3).

Lynda Birke. *Feminism and the Biological Body*. New Jersey: Rutgers University Press, 2000.

Donna Haraway. *Modest\_Witness*,. New York: Routledge, 1997.

Jennifer Terry and Melodie Calvert (eds). *Processed Lives: Gender and Technology in Everyday Life*. New York: Routledge, 1997.

### **Grade Distribution**

Attendance and Active Participation	10%
Critical Reading Response Papers	30%
Essay Proposal	15%
Oral Presentation	15%
Final Essay	30%

#### **Attendance and Active Participation:**

You are expected to read all the material assigned in class. The bulk of the work in this class will focus on the assigned readings. Each class, we will discuss the readings and your participation will be expected. If you miss more than three classes you will receive a grade of 0/10 for this portion of the class grade.

#### **Critical Reading Responses:**

You will be asked to prepare reading response assignments throughout the term, reflecting critically on the readings. There will be three reading responses in total. Your reading responses should be 2-3 pages, typed and double-spaced. Always bring two copies of your reading responses to class. One copy should be handed in at the beginning of class and one copy should be for your own reference during the class discussions.

#### **Essay Proposal and Oral Presentation:**

You are required to write a final paper for this course. To help you along in this process, you will be asked to submit a 2-3 page essay proposal with an annotated bibliography at least one month before your essay is due. In this proposal, you should clearly state your essay topic and how you plan to approach your research topic. Your essay proposal is worth 10% and the annotated bibliography is worth 5% of your final mark.

You will be asked to make an oral presentation based on your final essay. Please feel free to be as creative as you wish to be for this presentation. You should prepare to present your topic for 20 minutes and follow up with a 10-minute class discussion period. Please let me know ahead of time if you will require any special equipment for your presentation. Your presentation is worth 15% of your final mark.

**Final Essay:**

Your final essay will be due during exam week. This essay should be between 10-12 pages in length, not including your bibliography. The topic of your essay is up to you, but must be based on one of the topics covered in class.

**Assignment Schedule:**

<u>Date</u>	<u>Assignment Type</u>	<u>Percentage of Final Grade</u>
February 8, 2005	Reading Response #1	10
March 1, 2005	Reading Response #2	10
March 22, 2005	Reading Response #3	10
April 12, 2005	Essay Proposal	15
April 26-May 10, 2004	Oral Presentation	15
May 11, 2004	Final Assignment	30

**Grade Distribution:**

A = 94-100 %	C+ = 77-79 %	D- = 60-63%
A- = 90-93 %	C = 74-76 %	F = Below 60%
B+ = 87-89 %	C- = 70-73 %	
B = 84-86 %	D+ = 67-69%	
B- = 80-83 %	D = 64-66 %	

**Schedule**

**Part I - Role of Women in Science and Technology**

**Week 1. Introduction and Review of Course Syllabus**  
(Jan. 25/27)

Movie: Double Helix (107 minutes)

**Week 2. Historical Perspectives: Where are the Women?**

(Feb. 1/3)

Sally Gregory Kohlstedt. "Sustaining Gains: Reflections on Women in Science and Technology in 20<sup>th</sup> Century United States". *NWSA Journal* 16 (1):1-26. (R)

Amy Sue Bix. "From Engineeresses' to 'Girl Engineers' to Good 'Engineers': A History of Women's U.S. Engineering Education". *NWSA Journal* 16(1): 27-49. (R)

Suzanne G. Brainard and Linda Carlin. "A six-year longitudinal study of undergraduate women in engineering and science". *The Gender and Science Reader*, Muriel Lederman and Ingrid Bartsch (eds). New York: Routledge, 2001. 24-37. (R)

Josephine Beoku-Betts. "African Women Pursuing Graduate Studies in the Sciences: Racism, Gender Bias, and Third World Marginality". *NWSA Journal* 16(1): 116-135. (R)

Ruth Hubbard. "Science, Power, Gender: How DNA Became the Book of Life". *Signs* 28(3): 791-800.

Movie: DNA Detective: Molecular Biologist Lydia Villa-Komaroff (60 minutes)

**Week 3. The Making of Gendered Science**

(Feb. 8/10)

Critical Reading Response #1 Due Feb.8th

Evelyn Fox Keller. "Secrets of God, Nature, and Life". *The Gender and Science Reader*, Muriel Lederman and Ingrid Bartsch (eds). New York: Routledge, 2001. 98-110. (R)

Carolyn Merchant. "Dominion Over Nature". *The Gender and Science Reader*, Muriel Lederman and Ingrid Bartsch (eds) New York: Routledge, 2001. 68-81. (R)

Anne Fausto-Sterling. "Life in the XY Corral". *The Gender and Science Reader*, Muriel Lederman and Ingrid Bartsch (eds). New York: Routledge, 2001. 234-251. (R)

Bonnie Spanier. "Foundations for a "New Biology," Proposed in Molecular Cell Biology". *The Gender and Science Reader*, Muriel Lederman and Ingrid Bartsch (eds). New York: Routledge, 2001. 272-288. (R)

Londa Schiebinger. "Feminist History of Colonial Science". *Hypatia* 19(1): 233-254.

Movie: Bill Moyer's World of Ideas: Science and Gender – Evelyn Fox Keller (30 minutes)

**Week 4. Feminist Scientists Speak Out!**

(Feb. 15/17)

Ruth Hubbard. "Science and Scientific Criticism". *The Gender and Science Reader*, Muriel Lederman and Ingrid Bartsch (eds). New York: Routledge, 2001. 49-51. (R)

Evelyn Fox Keller. "From working scientist to feminist critic". *The Gender and Science Reader*, Muriel Lederman and Ingrid Bartsch (eds). New York: Routledge, 2001. 59-62. (R)

Bonnie Spanier. "How I came to this study". *The Gender and Science Reader*, Muriel Lederman and Ingrid Bartsch (eds). New York: Routledge, 2001. 52-58. (R)

Banu Subramaniam. "Snow Brown and the Seven Detergents". *Women, Science, and Technology*, Wyer, Barbercheck, Giesman, Ozturk, and Wayne (eds). New York: Routledge, 2001. 36-41. (R)

Evelyn Hammonds and Banu Subramaniam. "A Conversation on Feminist Science Studies". *Signs* 28(3):923-944.

Movie: Asking Different Questions (51 minutes)

## Part II – Feminist Critiques of Science

### **Week 5. Genetic Engineering and Patenting**

(Feb. 22/24)

Donna Haraway. "Semantics: Modest\_Witness@Second\_Millennium.FemaleMan©\_Meets\_Oncomouse™". *Modest\_Witness*,. New York: Routledge, 1997. 21-124.

Movie: The Secret of Life: The mouse that laid the golden egg (60 minutes)

### **Week 6. Techno-babble: War and Crusades**

(Mar. 1/3)

Critical Reading Response #2 Due March 1<sup>st</sup>.

Donna Haraway. "Technoscience in Hypertext". *Modest\_Witness*,. New York: Routledge, 1997. 125-172.

### **Week 7. Reproductive Technologies**

(Mar. 8/10)

Donna Haraway. "Fetus: The Virtual Speculum in the New World Order". *Modest\_Witness*,. New York: Routledge, 1997. 173-212.

Bonita Makuch. "Inseminations". *Processed Lives: Gender and Technology in Everyday Life*, Jennifer Terry and Melodie Calvert (eds). New York: Routledge, 1997. 139-144.

David Horn. "Unnatural Acts: Procreation and the Geneology of Artifice". *Processed Lives: Gender and Technology in Everyday Life*, Jennifer Terry and Melodie Calvert (eds). New York: Routledge, 1997. 145-154.

Kathy High. "23 Questions". *Processed Lives: Gender and Technology in Everyday Life*, Jennifer Terry and Melodie Calvert (eds). New York: Routledge, 1997. 155-163.

Soheir Morsy. "Biotechnology and the Taming of Women's Bodies". *Processed Lives: Gender and Technology in Everyday Life*, Jennifer Terry and Melodie Calvert (eds). New York: Routledge, 1997. 165-174.

Ruth Schwartz. "Medicine, Technology, and Gender in the History of Prenatal Diagnosis". *Feminism in the Twentieth-Century Science, Technology, and Medicine*, Creager, Lunbeck, and Schiebinger (eds). London: University of Chicago Press, 2001. 186-196.

**Week 8. Returning to the Body - Part I**

(Mar. 15/17)

Lynda Birke. *Feminism and the Biological Body*. New Jersey: Rutgers University Press, 2000. 1-84.

Nelly Oudshoorn. "On Bodies, Technologies, and Feminisms". *Feminism in the Twentieth-Century Science, Technology, and Medicine*, Creager, Lunbeck, and Schiebinger (eds). London: University of Chicago Press, 2001. 199-213.

**Week 9. Returning to the Body - Part II**

(Mar. 22/24)

Critical Reading Response #3 Due March 22<sup>nd</sup>.

Lynda Birke. *Feminism and the Biological Body*. New Jersey: Rutgers University Press, 2000. 85-176.

**Week 10. Spring Break**

(Mar. 29/31)

**Part III - Feminist Transformations of Science**

**Week 11. Feminist Epistemologies of Science**

(Apr. 5/7)

Sandra Harding. "A Socially Relevant Philosophy of Science?" *Hypatia* 19(1): 25-47.

Karen Barad. "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter". *Signs* 28(3): 801-832.

Nancy Tuana. "Coming to Understand: Orgasm and the Epistemology of Ignorance". *Hypatia* 19(1): 194-232.

**Week 12 Feminist Methodologies of Science**  
(Apr. 12/14)

Essay Proposal Due April 12<sup>th</sup>.

Lisa Weasel. "Feminist Intersections in Science: Race, Gender and Sexuality through the Microscope". *Hypatia* 19(1): 183-193.

Deboleena Roy. "Feminist Theory in Science: Working Toward a Practical Transformation". *Hypatia* 19(1): 255-279.

Kirsten Campbell. "The Promise of Feminist Reflexivities: Developing Donna Haraway's Project for Feminist Science Studies". *Hypatia* 19(1): 162-282

**Week 13 Technologies of Subversion and Household "Tools"**  
(Apr. 19/21)

Margaret Morse. "Virtually Female: Body and Code". *Processed Lives: Gender and Technology in Everyday Life*, Jennifer Terry and Melodie Calvert (eds). New York: Routledge, 1997. 23-36.

Mary Ellen Strom. "Girl TV". *Processed Lives: Gender and Technology in Everyday Life*, Jennifer Terry and Melodie Calvert (eds). New York: Routledge, 1997. 37-40.

Nina Wakeford. "Networking Women and Grrrls with Information/Communication Technology: Surfing Tales of the World Wide Web". *Processed Lives: Gender and Technology in Everyday Life*, Jennifer Terry and Melodie Calvert (eds). New York: Routledge, 1997. 51-66.

Judith Halberstam. "Techno-Homo: On Bathrooms, Butches, and Sex with Furniture". *Processed Lives: Gender and Technology in Everyday Life*, Jennifer Terry and Melodie Calvert (eds). New York: Routledge, 1997. 183-194.

Ira Livingston. "Indiscretions: Of Body, Gender, Technology". *Processed Lives: Gender and Technology in Everyday Life*, Jennifer Terry and Melodie Calvert (eds). New York: Routledge, 1997. 95-102.

**Week 14      Oral Presentations**  
(Apr. 26/28)

**Week 15      Oral Presentations**  
(May 3/5)

**Week 16      Oral Presentations**  
(May 10)

**Final Essay Due on May 12<sup>th</sup>, by 12:00 pm in my office.**