History 117
Women, Science, and Technology

Fall 2005                             Prof. Cooper

In this class we will explore the contribution of women engineers and scientists to their disciplines (women in science & engineering), as well as the impact of technology and science on the lives of everyday (women and science & technology). We will take an historical perspective on women’s experiences and focus generally on the United States. Among the themes that we will explore in the first half of the course are women’s access to education, patterns of employment, conflicts with family life, professional recognition, mentorships, workplace culture, and intellectual contributions. When we turn to the impact of science and technology on everyday life, we will consider the mechanization of housework, the entrance of women into new technically skilled jobs, feminist designs, the medicalization of women’s bodies, women’s appropriation of new technologies, and the power of consumers to shape products and markets.

Office hours
Maginnes Hall, Room 334.
Tuesday, 2:30-4:00; Wednesday, 9:00-10:00. And by appointment
gc05@lehigh.edu       Office phone 610-758-4703.

Required reading:
Evelyn Fox Keller. A Feeling for the Organism.
George Johnson, Miss Leavitt’s Stars
Articles: The articles assigned will be posted electronically on the Blackboard.

Grading and assignments
Reading, attendance, participation, and study questions       20%
Quizzes (2)                                                30%
Short paper (Miss Leavitt’s Stars)                        15%
Final paper project
    Short paper (A Feeling for the Organism)        20%
    Expanded paper                                 15%

Class discussion of reading
Keeping up with the reading posted on Blackboard is essential. You will be expected to come to class each Thursday ready to discuss the week’s assignments. In addition, twice during the semester you will be expected to post discussion questions for the reading on Blackboard. Please post your study questions by Tuesday before the discussion.
You will also read two books over the semester: George Johnson’s Miss Leavitt’s Stars and Evelyn Fox Keller’s A Feeling for the Organism. You may read them at your own pace, but a suggested reading schedule for these books is listed in the syllabus. Keeping up with this reading is important as well; you must turn in a short paper on Miss Leavitt’s Stars on September 20, and a short paper on A Feeling for the Organism on November 15. See details below.

Papers
You can expect to write two short papers (4-5 pages): one on George Johnson’s Miss Leavitt’s Stars, and a second on Evelyn Fox Keller’s A Feeling for the Organism. Essays should be typed, double-spaced, with standard 1” margins; please submit a paper copy in class, and put an electronic copy in the Digital Drop-box by the end of the day. Your essay on Miss Leavitt’s Stars is due September 20, and A Feeling for the Organism is due November 15.

The second paper will become part of your final project. Evelyn Fox Keller’s book, A Feeling for the Organism, is about the career of Nobel-prize winning geneticist, Barbara McClintock. McClintock’s letters have been gathered in an electronic archive, and your assignment is to read some of the collection on-line, and to use this new material to expand your short paper into a longer paper (8-10 pages). This expanded paper is due in class Dec. 5; please put an electronic copy in the Digital Drop-box by the end of the day.

Quizzes
There will be two quizzes, October 18 and November 1.

Accommodations for Students with Disabilities: If you have a disability for which you are or may be requesting accommodations, please contact both your instructor and the Office of Academic Support Services, University Center 212 (610-758-4152) as early as possible in the semester. You must have documentation from the Academic Support Services office before accommodations can be granted.

Reading and Discussion Schedule

Week 1: The practice of science & engineering; the debate over women’s capabilities
#1 Charles Rosenberg & Carroll Smith-Rosenberg, “The Female Animal: Medical and Biological Views of Woman and Her Role in 19th-century America,” JAH, 60 (1973), 739-754. [16]
Aug 30 Introduction
September 1 Discussion
Week 2: The question of women’s access; education, professionalism, and jobs


Johnson, Miss Leavitt’s Stars, pp. 1-69.

Sept 6
Sept 8 Discussion

Week 3: The private side of professional life: parents, spouses, children


Johnson, Miss Leavitt’s Stars, pp. 70-130.

Sept 13
Sept 15 Discussion

Week 4: Professional recognition: acceptance, support, achievement


Sept 20 Short paper #1 due in class
Sept 22 Discussion

Week 5: Are women’s contributions to their fields different than men’s?


Sept 27
Sept 29 Discussion

Week 6: Women in science & engineering today

Oct 4
Oct 6 Discussion

**Week 7: Women in science & engineering today**
Oct 11 No class; Pacing Break
Oct 13 Discussion


**Week 8: Redesigning Housework: Women as Experts**

*Keller, forward, preface, and chapters 1,2,3 [62]*
Oct 18 **Quiz #1**
Oct 16 Discussion

**Week 9: The Industrial Revolution in the Home**

*Keller, chapters 5, 6, 7 [58]*
Oct 25
Oct 27 Discussion

**Week 10: New Technology and Paid Work: Creating New Jobs?**
#20 TBA

*Keller, chapters 8, 9, 10 [51]*
Nov 1 **Quiz #2**
Nov 3 Discussion

**Week 11: Transportation, Sociability, and Power**
Week 12: Women’s Bodies and Health


Nov 15 Final project-short paper

Week 13: Historical Sources

Nov 22

Nov 24 No class. Thanksgiving.

Week 14: Do Consumers Shape Technology?


Nov 29

Dec 1 Discussion

Week 15: Women, Science, and Technology

Dec 6

Dec 8 Final project-expanded paper due