History 160/260
Historical Approaches to the Study of Science: Gender and Science

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Class Hours: Mondays 10-12:50

Synopsis Science has been a powerful force in Western culture, not only in constructing the technological world, but also in shaping our visions of our selves. Science has provided culturally authoritative answers to the questions: Who we are? What might we be? How can we interact with the natural world? Yet, throughout the history of science, women have been conspicuously absent as participants (although not as objects of study). Even today, women constitute a minority in most branches of science, a small minority in physics, engineering and computer science, and an even smaller minority in the National Academy of Sciences and other positions of power and prestige in the scientific community. Why is this so and what difference has it made? How and why have women been systematically excluded from participating in the scientific enterprise? How has their exclusion affected scientific knowledge? How have male scientists constructed gendered representations not only of women, but of nature itself?

Logistics This course is open to undergraduates (History 160) and graduate students (History 260). Students from all departments are welcome. The course meets once a week in seminar format. All students will be expected to come to class with a one-page synopsis of the assigned reading, prepared to discuss it. Each student will also be required to complete a term paper (10-15 pages for undergraduates, 20-30 pages for graduate students) on a topic of his or her choice. The final exam will consist of oral presentations of student research.

Required texts On sale at Groundworks books, or from www.amazon.com, www.bn.com, or www.borders.com. On-line book sellers may have better prices—check!

Anne Fausto-Sterling, *Myths of Gender* (Basic Books, 1985).

Evelyn Fox Keller, *A Feeling for the Organism: The Life and Work of Barbara McClintock* (W.H. Freeman, 1983).

Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (Harper San Francisco, 1990).

Margaret W. Rossiter, *Women Scientists in America: Struggles and Strategies to 1940* (Johns Hopkins University Press, 1982).

Suzanne J. Kessler, *Lessons from the Intersexed* (Rutgers University Press, 1998).

Schedule

Week 1 Overview: The problem of women in (or not in) science
Reading: Londa Schiebinger, *The History and Philosophy of Women in Science: A Review Essay* (to be read and discussed in class).

Week 2 Nature as female: Epistemic and environmental consequences of the scientific revolution
Reading: Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution*

Week 3 An alternative view: Vickers, "Those Damn Shad."
Submit preliminary idea for paper topic.

Week 4 A famous woman's life in science: Barbara McClintock

Reading: Evelyn Fox Keller, *A Feeling for the Organism: The Life and Work of Barbara McClintock*

Week 5 An alternative view: Comfort, "Barbara McClintock's controlling elements"

Week 6 Less famous women's lives in science: Unhappy realities and invisibility
Reading: Rossiter, *Women Scientists in America: Struggles and Strategies to 1940*, preface and 1-128, 160-217 and 267-316. [Graduate students READ THE WHOLE BOOK].

Week 7 Psychoanalysis of science: Object relations and objectivity
Readings: Selections from Chodorow, Keller, and Fee.

Week 8 The Heroic Myth: Science as passion quest
Reading: Oreskes "*Objectivity or heroism?*"
Assignment → Submit outline and introduction for paper topic.

Week 9 The nature of female: Science constructs gender
Reading: Anne Fausto-Sterling, *Myths of Gender*

Week 10 Male and female: Science constructs sex
Reading: Kessler, *Lessons from the Intersexed*.

Final exam: Oral presentations of student research
Final paper due during exam week.