

**Course Title: Science and Society in the Age of Enlightenment, France 1715-1799**  
**Kathleen Kete, Associate Professor of History**

**Course Description:**

This social history of science in eighteenth-century France examines the Academy of Science, the Republic of Letters and the salons, the importance of patronage and informal networks of training, the role and place of women in science, the importance of mathematics and mapping to a militarized state, the practice of natural history, and the popularization of science on the eve of the French Revolution. It explores how and why scientific ideas and methods could develop within the heart of the absolutist state. It ends with a consideration of science to the Revolutionary project and the post-revolutionary state.

**Course Requirements:**

1. Class participation. Do all reading. Come to class prepared to discuss the reading. Study questions on some material handed out in advance. More than three absences in the semester for whatever reason will result in a drop of grade.
2. Discussion papers on the reading
3. midterm
4. student presentations and 8-10 page paper on scientist active in 1789
5. final exam
6. Academic honesty. A good historian is an honest historian. All cases of academic dishonesty will be prosecuted to the fullest extent possible.

**Course materials:**

Readings drawn from the following:

1. Roche, Daniel, *France in the Enlightenment* (1998).
2. Anne Goldgar, *Impolite Learning: Conduct and Community in the Republic of Letters, 1680-1750* (1995).
3. Martin Rudwick, *Bursting the Limits of Time: The Reconstruction of Geohistory in the Age of Revolution* (2005).
4. Roger Hahn, *The Anatomy of a Scientific Institution: The Paris Academy of Science 1666-1803* (1971)
5. Charles Withers, *Placing the Enlightenment: Thinking Geographically about the Age of Reason* (2007).
6. Charles Paul, *Science and Immortality: The Eloges of the Paris Academy of Sciences (1699-1791)* (1980).
7. Robert Darnton, *The Great Cat Massacre and other Episodes in French Cultural History*
8. Dena Goodman, *The Republic of Letters: A Cultural History of the French Enlightenment* (1994),
9. David Bodanis, *Passionate Minds* (2006)

10. Londa Schiebinger, *The Mind Has No Sex? Women in the Origins of Modern Science* (1989)
  11. Ken Alder, *The Measure of All Things* (2002).
  12. Charles Gillispie, *Science and Polity in France: The Revolutionary and Napoleonic Years* (2004)
- You will also see the film, *Ridicule*.

### **Schedule of Reading and Assignments**

#### Week One:

1. Introduction to the course-  
Description of the set of ideas available for thinking about the natural (as opposed to supernatural world) at the beginning of the eighteenth century
2. The absolutist state-  
French absolutism and its need to know  
Read- Roche, *France in the Enlightenment*, chapters one, two, eight and eleven.

#### Week Two:

- Social models of science in the eighteenth century
1. The Republic of Letters  
Read- Goldgar, *Impolite Learning*, “prologue” and chapter one and Rudwick, *Bursting the Limits of Time*, chapter one: “Naturalists, philosophers, and others.”
  2. The Academy of Science and provincial academies  
Read- Hahn, *The Anatomy of a Scientific Institution*, selections and Withers, *Placing the Enlightenment*, chapter four.

#### Week Three:

- Becoming a Scientist, Part one.
1. Class discussion of Paul, *Science and Immortality* including Appendix F ( *éloges* by Fontenelle, Fouchy, and Condorcet. Bring the reading to class.
  2. The Enlightenment  
Read Roche, *France in the Enlightenment* chapters fifteen, sixteen, seventeen and eighteen

#### Week Four:

1. Mapping Knowledge: The *Encyclopédie*  
Class discussion of Darnton, *Great Cat Massacre*, chapter on the *Encyclopédie*.  
Meet at the Watkinson to look at the *Encyclopédie*
2. Mapping Learning:  
Paris and Versailles- epicenters of knowledge  
Read: Goodman, *Cultural History of Enlightenment*, on salons

Week Five:

1. Becoming a Scientist, Part two.

Class discussion of Bodanis, *Passionate Minds*.

2. Women and the Enlightenment: Read Goodman, *Cultural History of the French Enlightenment*

Week Six:

1. Continued discussion of women and science

Read Schiebinger, *The Mind Has No Sex?*.

2. Discussion of *Ridicule*

Week seven:

1. French absolutism at the death of Louis XV

2. Louis XVI and pre-revolutionary France

Week eight:

1. exam

2. Natural History and the State: Buffon's *Natural History*

Meet at Watkinson Library to discuss Buffon

Week nine:

1. Exploration and the State: Naturalist Explorers

Read Withers, *Placing the Enlightenment*, chapters five, six and seven.

2. Exploring France

Read Withers, *Placing the Enlightenment*, chapter eight.

Week ten:

1. France on the eve of Revolution

2. Mathematics and the state

Napoleon, Monge and Descriptive Geometry

Week eleven:

1. Science as Revolution-

The Meter: Read Alder, *The Measure of All Things*, selections

2. Science during the Revolution

Read Gillispie, *Science and Polity*, pp. 7-36.

Week twelve:

1. Student presentations on scientists involved in the Revolution
2. Student presentations on scientists involved in the Revolution