

0116-328-01  
Honors Seminar  
Fall 2005  
4 units

Professor David Stump  
Office CA room D5b  
Office Hours W 10—1:00  
and by appointment  
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## **Syllabus**

# **The Social Implications of Scientific Rationality**

Enlightenment philosophers such as Condorcet and Kant viewed the rise of modern science as the triumph of reason over dogmatic religion and superstition. They claimed that progress in science and technology would have a strongly positive impact on society and that the application of scientific methods to society itself would automatically lead to human happiness and social and political justice. Despite some clear successes, such as the public health movement in the nineteenth century, the encroachment of technical science on society and the resulting rise of bureaucratic control has been seen as a threat by many. By the late nineteenth and early twentieth centuries, the progressive vision of modern society which arose in the Enlightenment seemed to lead to a society divided by class and gender, to machines of mass destruction, and to alienation and a loss of meaning and value. Nevertheless, in the early twentieth century artists, architects, philosophers and both left and right wing political movements attempted to apply the modern scientific world view as never before. We will begin with an argument that the scientific revolution was political from the beginning; indeed that modern science and modern politics are two sides of the same coin (Shapin and Schaffer). We will then consider attempts to diagnose why the progressive ideal of modernism has become problematic (Weber), and debate whether we should redefine and extend the Enlightenment project (Habermas) or fight against it (Foucault).

### **GOALS AND LEARNING OUTCOMES**

After taking this course students will have an understanding of the philosophical underpinnings of the Enlightenment. They will have an understanding of the relationship between science and modern culture, especially political theory, philosophy, art and architecture. They will understand some of the problems inherent to the scientific study of human beings, and they will have understood debates over the impact of science and technology has had on human values and ethics. Students will develop their speaking and writing skills in this course, and learn how to participate in a cooperative seminar-style learning environment.

### **REQUIREMENTS**

Class participation, one or two short formal presentations, summaries of two Philosophy Colloquium series events, Honors Program events, and three 5-8 page papers. Attendance at Honors program events that take place during the Fall semester are required. No examinations. The presentations will count 10% , summaries 15%, class participation 15%, and each paper will count 20% of the final grade. Missing or late assignments count as zero (0). Final letter grade will be determined on the basis of total points, not on average letter grades given on the assignments.

### **ATTENDANCE AND MAKE UP WORK**

Serious illness, a family emergency, and student activities which are official, required and cannot be avoided are the only reasons that will be accepted for missing class or turning in papers late. You must either inform me in advance of an excuse for missing a deadline, or else have written documentation. You are expected to attend class and will be penalized for non-attendance.

### **REQUIRED TEXTS**

Shapin  
Shapin and Schaffer

[available at the bookstore ]  
*The Scientific Revolution*  
*Leviathan and the Air Pump*

Michel Foucault

*Discipline and Punish*

Syllabus -- Schedule

**Section 1 Enlightenment and Cultural Modernity**

Week 1 8/31	Introduction view film: read Shapin	Fritz Lang's "Metropolis" <u>The Scientific Revolution</u>
Week 2 9/7	Kant Condorcet Tocqueville	"What is Enlightenment" "Sketch for . . . Progress of the Human Mind" selections from <i>Democracy in America</i>
Week 3 9/14	Max Weber and	"Religious Rejections of the World and Their Directions" "Science as a Vocation"
Week 4 9/21 9/21	Marcuse Galison Required Honors Program Event:	"Some Social Implications of Modern Technology" "Aufbau/Bauhaus" Prothero Lecture 4 PM
Week 5 9/28 First Paper Due Monday, 10/3/05	Foner Bradford & Blume	"The Meaning of Freedom in the Age of Emancipation" "Introduction," "Anthropology Days" & Witch Boy from <i>Ota Benga: The Pygmy in the Zoo</i>

**Section 2 The Scientific Revolution as Politics**

Week 6 10/5	Shapin and Schaffer Shapin and Schaffer Connant	Chapter I Chapter VI, pp. 225-231 "Robert Boyle's Experimental Pneumatics"
Week 7 10/12	Shapin and Schaffer	Chapters II and III
Week 8 10/19 10/17	Shapin and Schaffer Required Honors Program Event:	Chapters VII and VIII Kornbluth Lecture
Week 9 10/26 Second Paper Due Monday, 10/31/05	Potter Theweleit	"Making Gender/Making Science " <i>Male Fantasies</i> chapter 1 & 2

**Section 3 The Construction of the Modern Individual in Mass Society**

Week 10 11/2	Foucault	<u>Discipline and Punish</u> , pp. 3-69
Week 11 11/9	Foucault	<u>Discipline and Punish</u> , pp. 73-156
Week 12 11/16 11/15	Foucault Required Honors program event:	<u>Discipline and Punish</u> , pp. 156-228 roundtable 4 PM
11/23	Thanksgiving [no class]	
Week 14 11/30	Foucault	<u>Discipline and Punish</u> , pp. 231-308
Week 15 12/7 Third, Final Paper Due Thursday, December 15, 2005	Habermas	"Technology and Science as 'Ideology'"