

## *Philosophy 520 – Philosophy of Science – Fall, 2011*

*Elliott Sober*

**Requirements:** Attendance in class and participation in discussion are required and will affect your grade. There will be unannounced quizzes, a midterm exam, two short papers (4-5 double-spaced pages on a topic to be assigned, hardcopy to be submitted in class), and an exam on the last day of classes. Completion of all assignments is a requirement for passing the course.

**Office Hours:** My office hours are W 1:30-3:30, or by appointment, in 5199 Helen C. White Hall.

**Readings:** We will read Martin Curd and J.A. Cover's *Philosophy of Science – the Central Issues* (Norton, 1998), which will be available at University Bookstore. In addition, we will read the following articles: Carl Hempel, "Problems and Changes in the Empiricist Criterion of Meaning;" Rudolf Carnap, "Empiricism, Semantics, and Ontology;" W.V. Quine, "On Carnap's Views on Ontology;" Elliott Sober, "Introduction to Bayesian Epistemology;" John Beatty, "The Evolutionary Contingency Thesis," Jerry Fodor, "The Special Sciences."

### **Syllabus:**

Week	Date	topics and readings from C&C	C&C chapter*	additional readings and schedule of papers and exams
1	9/6-8	Demarcation: Popper, Kuhn, Lakatos	1	
2	9/13			Hempel, "PCECM"
2-3	9/15-20	Rationality, Objectivity, Values: Kuhn, Kuhn, McMullin, Laudan	2	
3	9/22	Rationality, Objectivity, Values: Longino, Okruhlik	2	
4	9/27-29	Duhem-Quine Thesis: Duhem, Quine, Gillies	3	
5	10/4	Duhem-Quine Thesis: Laudan	3	Carnap, "ESO." Quine, "CVO." First Paper Due 10/4
5-6	10/6-11	Induction, Prediction, Evidence: Lipton, Popper, Salmon, Hempel	4	
6	10/13	Confirmation and Bayesianism: Salmon	5	Sober, "Introduction to Bayesian Epistemology."
7	10/18-20	Confirmation and Bayesianism: Glymour, Horwich	4	
8	10/25			First Exam 10/25
8	10/27	Explanation: Hempel3	5	
9	11/1-3	Explanation: Ruben, Railton	6	
10	11/8-10	Laws: Ayer, Dretske, Mellor	7	
11	11/15	Laws: Cartwright		Beatty, "ECT"
11-12	11/17-22	Reduction: Nagel, Feyerabend, Nickes	8	Fodor; 2 <sup>nd</sup> paper due 11/22
13	11/29,12/1	Realism: Maxwell, Van Fraassen, Musgrave, Laudan	9	
14	12/6-8	Realism: Hacking+Resnik, Fine+Musgrave.	9	
15	12/13-15			2 <sup>nd</sup> exam 12/15
<b>*When you read a chapter, also read Curd and Cover's introduction and commentary on that chapter.</b>				

