PHIL/ 435 Philosophy of Science Spring 2000 Prof. Don Howard
TTh 11:00-12:15 361 Decio/346 O'Shaughnessy
Flanner 323 Tel: 631-7547/-5015
Don.A.Howard.43@nd.edu
Office Hours: TTh 1:00-2:00

Texts: Martin Curd and J.A. Cover. *Philosophy of Science: The Central Issues.* New York: W.W. Norton and Company, 1998.

Requirements: There will be three components in the computation of your final grade for the course:

(1) ***Examinations*** (60 %). At mid-term and during final examination week, there will be in-class, essay examinations, each counting for 30% of the final grade. One week before each examination, a list of study questions will be distributed to assist you in preparing for the examination.

(2) ***Term Papers*** (30 %). Each student will be required to submit a final term paper, of a minimum of fifteen pages, on a topic to be worked out in consultation with the instructor.

(3) ***Class Participation*** (10 %). The remaining ten percent of your final grade will be determined on the basis of the quality and extent of your enthusiastic participation in the class.

One-minute Papers: Every class session will end a few minutes early to permit you to write a so-called "one-minute paper," in which you will write no more than two- or three-sentence answers to two questions: (a) What was the most important point covered in today's class? (b) What issue or question was left most unclear in your mind at the end of today's class? These one-minute papers will be required of every student at the end of every class session and will be collected at the end of class, but they will not be graded.

A Note on the Readings: The Curd and Cover anthology contains some very helpful material in addition to the readings themselves, most importantly, commentaries by the editors on all of the readings, a glossary, and a bibliography of additional readings on all of the subjects covered in the anthology. While these other materials are not included among the assigned readings for this course, you encouraged to read the commentaries in conjunction with the assigned readings, since you will find these commentaries to function as valuable study guides that will enable you to get the maximum benefit out of the discussion in class.

Schedule:

Date:	**Topic:**	**Readings:**
18 Jan.	Introductory Lecture	(Note—-All page number references are to the Curd and Cover anthology.)
20 Jan.	No Class	
25 Jan.	**Science and Pseudoscience**	Popper, CC 3-10; Kuhn, CC 11-19
27 Jan.		Lakatos, CC 20-26; Thagard, CC 27-37
1 Feb.		Ruse, CC 38-47; Laudan, CC 48-53; Ruse, CC 54-61

3 Feb.	**Rationality, Objectivity, and Values in Science**	Kuhn, CC 86-101; Kuhn CC 102-118
8 Feb.		McMullin, CC 119-138; Laudan, CC 139-169
10 Feb.		Longino, CC 170-191; Okruhlik, CC 192-208
15 Feb.	**The Duhem-Quine Thesis and Underdetermination**	Duhem, CC 257-279
17 Feb.		Quine, CC 280-301
22 Feb.		Gillies, CC 302-319; Laudan, CC 320-353
24 Feb.	**Induction, Prediction, and Evidence**	Lipton, CC 412-425; Popper, CC 426-432
29 Feb.		Salmon, CC 433-444; Hempel, CC 445-459
2 Mar.		Snyder, CC 460-480; Achinstein, CC 481-493
7 Mar.	***Mid-term Examination***	
9 Mar.	**Confirmation and Relevance: Bayesian Approaches**	Salmon, CC 551-583
14, 16 Mar.	***Spring Break***	
21 Mar.	**Confirmation and Relevance: Bayesian Approaches** (continued)	Glymour, CC 584-606; Horwich, CC 607-624
23 Mar.	**Models of Explanation**	Carnap, CC 678-684; Hempel, CC 685-694
28 Mar.		Hempel, CC 695-705; Hempel, CC 706-719
30 Mar.		Ruben, CC 720-745; Railton, CC 746-765
4 Apr.	**Laws of Nature**	Ayer, CC 808-825; Dretske, CC 826-845
6 Apr.		Mellor, CC 846-864; Cartwright, CC 865-877

11 Apr.	**Intertheoretic Reduction**	Nagel, CC 905-921; Feyerabend, CC 922-949
13 Apr.		Nickles, CC 950-970; Kitcher, CC 971-1003
18 Apr.	**Empiricism and Scientific Realism**	Maxwell, CC 1052-1063; van Fraassen, CC 1064-1087; Musgrave, CC 1088-1113
20 Apr.		Laudan, CC 1114-1135; Brown, CC 1136-1152
25 Apr.		Hacking, CC 1153-1169; Resnik, CC 1169-1187
27 Apr.		Fine, CC 1186-1208; Musgrave, CC 1209-1225
2 May		
8 May	**Term Papers Due** (Mon., 5:00 PM)	