PHIL 13185 Philosophy University Seminar: Philosophy of Science TTh 9:30–10:45 DeBartolo 347 Fall 2015

Prof. Don Howard 308 Malloy Hall Tel: 631–7547 dhoward1@nd.edu

Office Hours: TTh 2:00–3:00

Texts:

Richard DeWitt, *Worldviews: An Introduction to the History and Philosophy of Science* (Wiley-Blackwell). Plato, *The Republic and Other Works*, trans. B. Jowett (Anchor).

Galileo, The Essential Galileo, trans. Maurice Finocchiaro (Hackett)

René Descartes, Meditations on First Philosophy, trans. D. A. Cress (Hackett).

David Hume, An Enquiry Concerning Human Understanding, ed. E. Steinberg (Hackett).

Julien Offray de la Mettrie, Man, a Machine, and Man, a Plant, trans. Richard Watson and Maya Rybalka (Hackett)

Charles Darwin, The Descent of Man: The Concise Edition, ed. Carl Zimmer (Plume/Penguin)

Course Web Site: www.nd.edu/~dhoward1/ - Then follow the obvious link.

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

- (1) **Discussion Papers** (60 %). Each student will be required to submit four discussion papers, each a minimum of five pages, on topics to be worked out in consultation with the instructor. Each of the four discussion papers will be worth 15 % of the final course grade. Papers will be graded on the basis of both content and mechanics, the latter counting for approximately 20% of the grade on each paper.
- (2) *Journals* (25 %). You will be required to keep a journal to be used primarily to record your critical reactions to the assigned readings. At a minimum, you should write a one-page (minimum 300 words) critical response to each reading assignment, though you are encouraged to write more, taking advantage of this opportunity to record your thoughts on any topic related to the course and the readings. Journal entries will be graded on a random, unannounced basis several times over the course of the semester. In addition, the entire journal will be checked regularly to be sure that all required entries are included. You will submit your journal entries through the Sakai page for this course, creating a "blog" entry for each of the reading assignments. (Be sure to remember to check the option "Only **site administrators and I** can see this entry" and to "publish" your entry.) You will be graded rigorously on the extent to which you use your journal, the minimum of one page (300 words) per reading being strictly enforced. But it will be the quality of thinking manifest in your journal that will chiefly determine your grade.
- (3) *Class Participation* (15 %). The remaining fifteen percent of your final grade will be determined on the basis of the quality and extent of your enthusiastic and constructive participation in class discussion.

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.

Attendance: No more than two unexcused absences will be permitted during the semester; for every additional unexcused absence, the student's final course grade will be reduced by one step on a plus/minus basis. Thus, for example, for a student with three unexcused absences, a final grade of B+ becomes a B, and for a student with four unexcused absences, a final grade of B becomes a C+. A student more than fifteen minutes late for class is assumed to be absent. If you must miss a class for any reason, be sure to let me know beforehand, or as soon after the fact as possible, so as to enable me to determine whether or not to excuse the absence. I promise to be generous in allowing excused absences for legitimate purposes.

Schedule:

Date:	Topic:	Readings:	
25 Aug.	Introduction to the course.		
27 Aug.	Plato, The Apology.	Jowett edition, pp. 447-470	
1 Sep.	Plato, The Phaedo.	Jowett edition, pp. 489-519	
3 Sep.	"	Jowett edition, pp. 520-552	
8 Sep.	Plato, The Republic.	Books I & II, Jowett edition, pp. 9-70	
10 Sep.	"	Books III-V, Jowett edition, pp. 71-173	
15 Sep.	"	Books VI & VII, Jowett edition, pp. 174 - 233	
17 Sep.	"	Books VIII-X, Jowett edition, pp. 234 - 316	
18 Sep.	First Discussion Paper Due		
22 Sep.	Aristotelian and Ptolemaic Cosmology	DeWitt, Chapters 9-10	
24 Sep.	"	DeWitt, Chapters 11-13	
29 Sep.	The Copernican, Tychonic, and Keplerian Systems	DeWitt, Chapter 14	
1 Oct.	"	DeWitt, Chapters 15-16	
6 Oct.	Galileo's Challenge	DeWitt, Chapter 17	
8 Oct.	"	DeWitt, Chapters 18-19	
13 Oct.	Galileo, "Letter to the Grand Duchess Christina"	The Essential Galileo, pp. 109-145	
15 Oct.	"		
16 Oct.	Second Discussion Paper Due		
19-23 Oct.	Fall Break		
27 Oct.	Descartes, Meditations on First Philosophy.	Meditations I & II	
29 Oct.	"	Meditations III & IV	

3 Nov.	"	Meditations V & VI
5 Nov.	The Newtonian Worldview	DeWitt, Chapters 20 & 22
10 Nov.	Hume, An Enquiry Concerning Human Understanding.	§§ I-V
12 Nov.	"	§§ VI-IX
17 Nov.	"	§§ X-XII
19 Nov.	de la Mettrie, Man A Machine	de la Mettrie, pp. 27-76
20 Nov.	"	
24 Nov.	Third Discussion Paper Due	
26 Nov.	Thanksgiving Holiday	
1 Dec.	The Darwinian Worldview	DeWitt, chapters 27-28
3 Dec.	Darwin, The Descent of Man	Chapters 2-3
8 Dec.	"	Chapters 4-5
10 Dec.	"	Chapters 6-7

Fourth Discussion Paper Due

11 Dec.