Phil 32: Philosophy and the Rise of Modern Science

UCSD Winter term 2012 (January 9th – March 23rd)

M/W/F, 11:00-11:50 Warren Lecture Hall 2205

Instructor: Tim Jankowiak tjankowi@ucsd.edu 7043 H&SS office hours: Mon 12:00-2:00

Introduction:

Natural science and philosophy have always developed in parallel through mutual interaction and influence. In fact, for most of the history of western civilization there was not a strict distinction between them. This was never truer than in the early modern period (roughly the 17th – 18th centuries). Most scientists referred to themselves as "natural philosophers" and many of the period's greatest philosophers took part in the important debates regarding the new physical theories. Subsequently, the most cutting-edge philosophical theories were the ones that incorporated the best science of the day, and investigations into the workings of the physical world were guided by philosophical discussions of what possible forms the world could take. The purpose of this course is to provide an introduction to some of the most important and interesting points of intersection between the burgeoning worldview brought on by the scientific revolution and the ongoing investigation into the basic questions of philosophy (especially epistemology, metaphysics, humans nature, and the existence and nature of God).

No prior knowledge of the history of philosophy is presupposed for this course.

Required Course Materials:

The Scientific Background to Modern Philosophy (selected readings), ed. by Michael Matthews, Hackett Publishing Company [ISBN: 0872200752]

Readings in Modern Philosophy, Vol. I, ed. by Roger Ariew and Eric Watkins, Hackett Publishing Company [ISBN: 0872205347]

Readings in Modern Philosophy, Vol. II, ed. by Roger Ariew and Eric Watkins, Hackett Publishing Company [ISBN: 0872205320]

Required Online Resources:

Course Website:

http://timjankowiak.com/teaching/phil32/

"turnitin" accessed through:

http://ted.ucsd.edu/

Course Requirements

Attendance: Although it will not directly contribute to one's grade, regular attendance should be considered a necessary component to success in the course. All topics covered in lecture (irrespective of whether they are emphasized in the assigned reading) are fair game for the midterm and final.

Quizzes: For every lecture, there will be 2-3 quiz questions posted on the course website at least one week prior to class. 5 times throughout the quarter, I will collect students' responses to these questions. On these days, the first 10 minutes of class will be devoted to the quizzes, but students can opt to write out the answers ahead of time. Note that I will not announce ahead of time when the quizzes will be collected. I will ignore each student's two lowest quiz grade.

Essays: There will be two written essays (the first will be 3-4 pages and the second 4-5). All written work must be uploaded to "turnitin" through web.ucsd.edu for originality analysis.

Midterm: The midterm (Friday, February 17th) will cover the material from the first 5 weeks of the class. It will be comprised of short answer questions.

Final: The final (Monday, March 19th) will be comprehensive, but will emphasize material from the last 5 weeks of the course. It will be comprised of short answer questions and longer essay questions.

Extra Credit: There will be two optional, 1-2 page writing assignments available as extra credit.

Grade Breakdown

Essay #1	30 pts	There are 200 "official" points available
Midterm	40 pts	in the course. Letter grades will be
Essay #2	50 pts	determined as follows: 194-200 = A+;
Quizzes	30 pts	187-193 = A; 180-186 = A-; 174-179 =
Final Exam	50 pts	B+; and so on
Extra Credit (x2)	10 pts (2x5 pts)	

Schedule

Week 1

Monday, January 9th - Introduction

No assigned reading

Wednesday, January 11th - The Aristotlean Tradition

Selections from *Physics* and *Posterior Analytics* (SBMP pp. 5-15; 26-32)

Friday, January 13th – Copernicus

Selections (SBMP pp. 33-44)

Week 2

Monday, January 16th - ***MLK Day: No class***

Wednesday, January 18th - Galileo

Selections from Two Dialogues (SBMP pp. 53-55; 61-81)

Friday, January 20th - Bacon

Selections from *The New Organon* (RMP1 pp. 4-7 & SBMP pp. 51-52)

Week 3

Monday, January 23rd – Descartes' "First Meditation" (and Dedication)

RMP1 pp. 22-24, 27-30

Wednesday, January 25th - Descartes' "Second Meditation"

RMP1 pp. 30-34

Friday, January 27th – Descartes' "Third Meditation"

RMP1 pp. 34-41

Week 4

Monday, January 30th - ***Class cancelled***

Wednesday, February 1st – "Descartes' Fourth Meditation"

RMP1 pp. 41-45

Friday, February 3rd - "Descartes' Fifth Meditation"

RMP1 pp. 45-48

Essay #1 due

Week 5

Monday, February 6th - "Descartes' Sixth Meditation"

RMP1 pp. 48-55

Wednesday, February 8th – Mechanistic physics

Selections from Descartes' Principles of Philosophy (RMP1 pp. 97-109)

Extra credit assignment #1 due

Friday, February 10th – Mechanistic physics (cont.)

Boyle selections from *Mechanical Philosophy* (SBMP pp. 111-123)

Week 6

Monday, February 13th – Newton's theory of space

Selections from *Principia* and *Optics* (RMP1 294-303)

Wednesday, February 15th – Leibniz's theory of space

Selections from the letters to Clarke (RMP1 pp. 304-313)

Friday, February 17th - Midterm

Bring a bluebook!

Week 7

Monday, February 20th - ***President's Day: No class***

Wednesday, February 22nd – Locke's empiricism

Selections from the *Essay* (RMP2 pp. 11-22)

Friday, February 24th - Locke's empiricism (cont.)

Selections from the *Essay* (RMP2 pp. 26-33; 36-40)

Week 8

Monday, February 26th - Locke's empiricism (cont.)

Selections from the *Essay* (RMP2 pp. 79-85; 96-98; 104-106)

Wednesday, February 28th – Hume's empiricism

Selections from the *Treatise* (RMP2 pp. 237-242; 245-247; 250-251)

Extra credit assignment #2 due

Friday, March 2nd - Hume's empiricism (cont.)

Selections from the *Treatise* (RMP2 251-263)

Week 9

Monday, March 5th – Hume's empiricism (cont.)

Selections from the *Treatise* (RMP2 pp. 263-265, 279-288)

 $Wednesday, March\ 7^{th}$ – Faith and Rationality: Pascal and Locke

Pascal's "The Wager" RMP1 123-125; from Locke's Essay RMP2 98-104

Friday, March 9th – Hume on Miracles

Inquiry section X (RMP2 371-380)

Week 10

Monday, March 12th – Hume and the Design Argument

Hume: Dialogues II-V (RMP2 401 – 414)

Wednesday, March 14th – Hume and the Design Argument (continued)

Hume: *Dialogues* IX, XI-XII (RMP2 414 – 416, 421 - 433)

Friday, March 16th - Conclusion

Essay #2 due

Final

Monday, March 19th, 11:30 - 2:30 (location TBD)

Bring a bluebook!