

**Philosophy 32 – Philosophy and the Rise of Modern Science**

MWF: 1:00-1:50 pm, WLH 2205

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Office Hours: MW 12:00-1:00 at Perks Coffee, or by appointment

Course Overview:

This course studies the philosophical roots of the scientific revolution in the 17<sup>th</sup> and 18<sup>th</sup> centuries, a period when novel philosophical ideas reshaped scientific methods, and when new scientific methods and instruments gave rise to novel philosophical ideas about the nature of the physical and mental worlds. We will be especially concerned with relating our authors’ philosophical ideas in metaphysics and epistemology to their methods of practicing natural philosophy both inside and outside the laboratory.

Reading Assignments:

Most readings can be found in the following books, which can be picked up at the UCSD Bookstore. Other readings will be made available via Ted.

*Selected Philosophical Works* by Francis Bacon  
*The Essential Galileo* edited by Maurice Finocchiaro  
*Philosophical Essays and Correspondence* by Rene Descartes  
*Newton’s Philosophy of Nature: Selections from his Writings*  
*Eighteenth Century Philosophy*, edited by Lewis White Beck (for all readings after 2/25)

<b>Day</b>	<b>Topic</b>	<b>Reading</b>	<b>Assignment Schedule</b>
Mon 1-7	Introduction	None	
Wed 1-9	Bacon	Bacon, p. 86-127 (Preface and I. 1-93)	
Fri 1-11		Bacon, p. 128-148 (Finish Book One)	Journal entry due
Mon 1-14		Bacon, p. 148-178 (Book II. 1-20) Skim p. 178-189	
Wed 1-16	Galileo	Galileo: Chapters 7.1, 7.2	Extra Credit Opportunity: The telescope
Fri 1-18		Galileo: Chapter 1	Journal entry due
Mon 1-21	No Class – MLK Holiday	No class	
Wed 1-23	Galileo	Galileo: Chapters 3.1-3.3; 8.1-8.5	

Fri 1-25	Galileo	Decrees of the Council of Trent (Ted) 4.2: Letter to the Grand Duchess Christina 5.1: Bellarmine's Letter to Foscsarini 9.7: Inquisition's Sentence	Journal entry due
Mon 1-28	Descartes	First Meditation	
Wed 1-30		Second Meditation	
Fri 2-1		Third Meditation	Journal entry due
Mon 2-4		Fourth Meditation	
Wed 2-6		Fifth Meditation and Sixth Meditation	
Fri 2-8		The World Part Six of Discourse on Method Principles, Part IV: 203-end.	Journal entry due
Mon 2-11	The Royal Society and Spinoza	Selections from Oldenberg-Spinoza correspondence	
Wed 2-13	Newton	Newton, p. 3-17	
Fri 2-15		Newton, p. 17-26	Journal entry due
Mon 2-18	No class – Holiday	No Class - Holiday	
Wed 2-20	Newton	Newton, p. 41-67	
Fri 2-22		Newton., p. 68-81	Extra credit opportunity: prism experiments
Mon 2-25	Leibniz	P. 194 – 214	Paper topics posted
Wed 2-27		- “On Body, Force, and Elasticity” (Ted)	
Fri 3-1	Berkeley	p. 63-92	
Mon 3-4			

Wed 3-6	Hume and Skepticism...and a discussion of your papers	p. 93-103	Draft of paper due
Fri 3-8		p. 103-113	
Mon 3-11		p. 114-131	Papers returned
Wed 3-13		P. 182-190	
Fri 3-15	Conclusion		Final revised paper due
Fri 3-22	Final Exam		

Requirements:

1. Reading Journal (140 points): The reading journal is primarily *for you*. I believe that there is no better way to clarify your thoughts about what you have read than by getting them on paper (or on the screen, as the case may be). I have no expectations for your reading journal other than these: first, that you write *something* (as much or as little as you want), based on one or more of the readings; and second, that you put in a good-faith effort to use the journal to your own intellectual benefit. If you meet these criteria, you will receive all 140 points. In addition, whenever someone's entry is particularly excellent, I may choose to share it with the rest of the class (and it then becomes part of the assigned reading). Extra credit and other benefits will also be awarded. **One entry must be submitted during each week for the first six weeks and it should address something of philosophical interest from one or more of the current readings and (optionally) reply to class discussions or earlier shared entries.**
2. Three Pop Quizzes (20 points each = 60 points): I will routinely send out questions and other notes to help guide your reading. On three random days, there will be a quiz at some point during class with questions that you will be well-equipped to answer if you have made use of the materials I sent out. (Note that one option for your reading journal is to write something inspired by or in response to these materials.)
3. At Least One Office Hours Visit (50 points): Preferably between weeks 2 and 5. We will discuss your writing and participation, make sure you're grasping the course material, and address any other concerns you might have.
4. Paper (50 points for early draft and 250 points for final draft): You will turn in one draft of your term paper on March 6. This should probably be a second or third draft. The following week, you will receive comments on your papers, and a revised version will be due on Friday, March 15. The paper should be five pages double spaced, 12 font.
5. Participation (200 points): Students should read the assigned material in advance and come ready to ask questions and participate in class discussions. I am not here to pass my

knowledge down to you dogmatically, but rather to be a knowledgeable guide as you think through the course material for yourself and bounce your ideas and hypotheses off of me or other students for further examination.

6. Final exam (250 points): The final exam will be cumulative and consist in two essay questions plus a handful of questions similar in kind to those on the quizzes.

Benefits Awarded for Shared Journal Entries:

1 entry shared: replace your lowest quiz grade with your highest

2 entries shared: option to propose your own term paper topic

3 entries or more shared: extra credit awarded (5-25 points)

Policies:

1. Late assignments are always welcome, but I reserve the right to assign a grade penalty.
2. All of the components for the class are required. More than six absences will result in an F for the course.
3. The Academic Honor Code must be observed in this course. If you are not sure whether you understand what constitutes plagiarism or cheating, please ask.
4. Students agree that by taking this course all required papers will be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the terms of use agreement posted on the Turnitin.com site.
5. If accommodations are needed for a disability or religious reasons, please notify me during the first class period or as soon as possible.