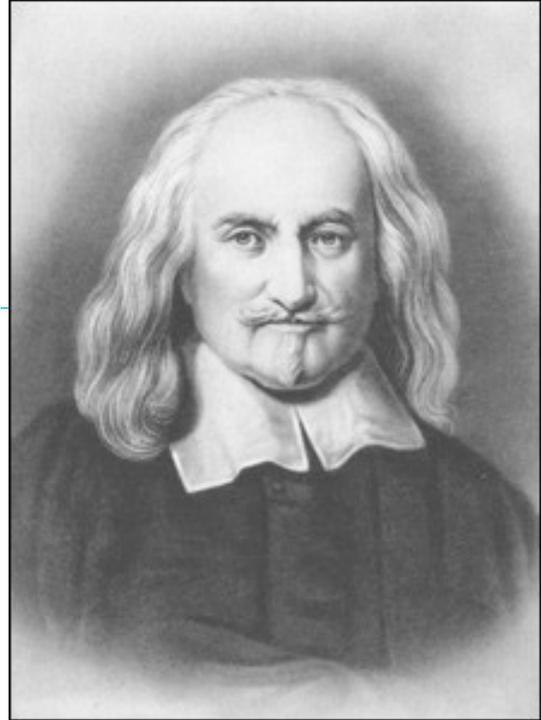


Hobbes & Science



Course Description:

Thomas Hobbes, like contemporary philosophers, saw himself as trying rework philosophy in light of then-current evidence from the biological and physical sciences. And so, while he is now best known for his political philosophy, during his life he was equally engaged with, and equally known for, developments in physiology, mathematics, and physics. In fact, he saw political philosophy and natural philosophy as two facets of a single project of reforming human knowledge and human activity in light of new evidence. In this class we will focus on Hobbes's writing in natural philosophy

-- the account of motion, the physiology of perception and optics -- and their connection to the overall project of reforming knowledge. Particular attention will be paid to how his metaphysics and epistemology dovetail with natural philosophy.

By the end of the course, you should be able to 1) describe the nature of "science" in early-modernity and its relation to causal reasoning and mathematics, 2) describe the main elements of Hobbes' professed philosophical methodology and how it relates to his account of scientific demonstration and his unified system of human knowledge and 3) Develop in detail a thesis regarding some particular element (of your choosing) within Hobbes's system of sciences.

Structure:

Week 1: Biography and Introduction.	Week 10: Mathematics.
Week 2: Philosophy of Language and Mind	Week 11: Method and Mathematics.
Week 3-4: First Philosophy and Organization of Sciences (and some Math)	Week 12: Politics and the Foundations of Politics.
Week 5: Method in Natural Philosophy.	Week 13: Back to Organization of the Sciences
Week 6: Perception.	
Week 7-9: Foundations of Science: Space, Body, Causation.	

Texts:

Available on Blackboard. I encourage you to buy anything still in print.

- Thomas Hobbes - *Elements of Philosophy* and other primary reading (see schedule).
- Hobbes, Thomas (1994). *Leviathan: With Selected Variants from the Latin Edition of 1668*, ed. E. Curley. Hackett Pub Co Inc. [This will be used for cross-reference only, we will focus on the *Elements of Philosophy*, distributed electronically].
- Pettit, Philip (2008). *Made with Words: Hobbes on Language, Mind, and Politics*. Princeton: Princeton University Press. [buy this, if only for the cover].
- Jesseph, Douglas M. (2000). *Squaring the Circle: The War Between Hobbes and Wallis*. University Of Chicago Press.
- Sorell, Tom (1996). *The Cambridge Companion to Hobbes*. Cambridge, New York: Cambridge University Press.
- Leijenhorst, Cees (2002). *The Mechnisation of Aristotelianism: The Late Aristotelian Setting of Thomas Hobbes' Natural Philosophy*. Leiden, Boston, Koln: Brill.
- Various essays (see schedule).

Recommended:

- Martinich, Aloysius (1996). *A Hobbes Dictionary*. Oxford, UK: Blackwell Reference.
- Laerke, Mogens, Justin E. H. Smith, and Eric Schliesser (2013). *Philosophy and Its History: Aims and Methods in the Study of Early Modern Philosophy*. Oxford University Press.
- Zinsser, William Knowlton (2006). *On Writing Well*. 30th anniversary ed., 7th ed., rev. and updated edition. New York: HarperCollins.

Grading:

- Weekly Participation (10%): This is a seminar and class time will be taken with discussion, not lecture. You should actively participate in discussion. Don't try to speak if you have nothing to say, but if you find that you have nothing to say, you have likely not prepared sufficiently.
- Weekly Reading Responses (20%): Each week please email me a one to two page "response" to one or more of the readings before class. Ideally you will provide a brief summary of the main line of argument *and* offer some criticism of the argument. These will be graded with Check Plus, Check, or Check Minus. **You may skip one week.**
- Presentation of Draft Paper (20%): During the last two weeks, each student will give a 15 to 20 minute presentation (with 10 min or so of discussion afterward) of their planned paper topic. The presentation should have three parts: 1) a brief setting of the context 2) a clear articulation of the argument and some defense of it 3) a statement of lingering questions or worries you have concerning the project. You'll also submit a corresponding draft paper that everyone will read and on which we will all offer feedback.
- Research Paper (50%): a 4000-7000 word paper on a topic of your choice (and related to the presentation). Topic will be cleared with me on or about March 25.
- Attendance: any absences must be cleared prior to the absence. I reserve the right to drop anyone from the course who misses two or more sessions without my advance approval.

Schedule: Reading are due on the date specified.

8/26/13	<ul style="list-style-type: none"> • <i>Stanford Encyclopedia of Philosophy</i>: “Thomas Hobbes” • <i>Cambridge Companion</i>: “A summary biography of Hobbes” - Noel Malcolm. • <i>De corpore</i> (English) : “Part First or Logic”, sections 1-5
9/2/13	<ul style="list-style-type: none"> • <i>Made with Words</i>: Chapter 1-3. • <i>Cambridge Companion</i>: “Hobbes’s psychology” - Bernard Gert
9/9/13	<ul style="list-style-type: none"> • <i>Cambridge Companion</i>: “Hobbes’s scheme of the science” - Tom Sorell • <i>Cambridge Companion</i>: “First philosophy and the foundations of knowledge” - Yves Charles Zarka.
9/16/13	<ul style="list-style-type: none"> • <i>Squaring the circle</i>: Chapter One: The Mathematical Career of the Monster of Malmesbury • <i>The Mechanisation of Aristotelianism...</i>: Chapter One: <i>Prima Philosophia</i>.
9/23/13	<ul style="list-style-type: none"> • <i>De corpore</i> (English) : “Part First or Logic”, section 6. • <i>Cambridge Companion</i>: “Hobbes and the method of natural science” - Douglas Jesseph. • “Hobbes and the School of Padua: Two Incompatible Approaches of Science” - Jan Prins. • “Hobbes’s and Zabarella’s Methods” - Helen Hattab
9/30/13	<ul style="list-style-type: none"> • <i>The Mechanisation of Aristotelianism...</i>: Chapter two: <i>Sense Perception and Imagination</i> • <i>Cambridge Companion</i>: “Hobbes on light and vision” - Jan Prins • “The Power of Images: Mathematics and Metaphysics in Hobbes’s Optics” - A. Malet.
10/9/13	<ul style="list-style-type: none"> • NB: Wednesday Class. • <i>De corpore</i> (English) : “Part Second”, section 7. • <i>The Mechanisation of Aristotelianism...</i>: Chapter Two: Space and Time. • “Hobbes on the Reality of Time” - Geoff Gorham.
10/14/13	<ul style="list-style-type: none"> • <i>De corpore</i> (English) : “Part Second”, section 8. • <i>The Mechanisation of Aristotelianism...</i>: Chapter Four: Body and Accident.
10/21/13	<ul style="list-style-type: none"> • <i>De corpore</i> (English) : “Part Second”, section 9-10. • <i>The Mechanisation of Aristotelianism...</i>: Chapter Five: Causality, Motion, & Necessity.
10/28/13	<ul style="list-style-type: none"> • <i>De corpore</i> (English) : “Part Second”, section 12-14 (skim), 15, 16 (skim). • <i>Squaring the circle</i>: Chapter Three: <i>De corpore</i> and the Mathematics of Materialism (p. 73-112).
11/4/13	<i>Squaring the circle</i> : Chapter Five: The “Modern Analytics” and the Nature of Demonstration.
11/11/13	<ul style="list-style-type: none"> • <i>Cambridge Companion</i>: “Hobbes’s political philosophy” - Alan Ryan • <i>Made With Words</i>: Chapter 4-5.
11/18/13	“Three Diverse Sciences in Hobbes: First Philosophy, Geometry, and Physics” - Sacksteder.
11/25/13	Presentations.
12/2/13	Presentations.
12/14/13	Term Paper Due by 5PM.