The purpose of this course is to explore the different ways that science and religion interacted during the seventeenth century. Special attention will be devoted to the theological dimensions of natural philosophy and the role of theological issues in the search for a new philosophy of nature. Reading of primary sources along with relevant interpretative material will provide the basis for class discussions and research papers.

1. Course Requirements

For Undergraduate Students

Take-home mid-term: 15%

Take-home final: 20%

Research paper: 40%

Participation: 25%

For Graduate Students
Annotated bibliography: 25%

Research paper: 50%

Participation: 25%

ALL WRITTEN WORK MUST CONFORM TO THE Department of History Essay Guide, which is available in the bookstore and on the History Department’s Home Page. Be sure to read the section on plagiarism carefully and make sure that you give proper credit to the sources of your work. Failure to do so will result in a failing grade and possible disciplinary action.

NB: All assignments must be completed in order to pass the course

2. Textbooks


Edwin Arthur Burtt, The Metaphysical Foundations of Modern Science

Betty Jo Teeter Dobbs and Margaret C. Jacob, Newton and the Culture of Newtonianism (New Jersey: Humanities Press, 1995)

3. Reserve Books

David C. Lindberg and Ronald L. Numbers, God and Nature

John Hedley Brooke, Science and Religion, Some Historical Perspectives

Margaret J. Osler, Divine Will and the Mechanical Philosophy


John Brooke and Geoffrey Cantor, Reconstructing Nature: The Engagement of Science and Religion

H. G. Alexander, ed., The Leibniz-Clarke Correspondence


Charles B. Schmitt and Quentin Skinner, editors, The Cambridge History of Renaissance Philosophy

Jan Wojcik, Robert Boyle and the Limits of Reason

4. Weekly Assignments

Readings for each week must be completed before the class meeting in order to ensure that an informed discussion can take place.

Jan. 11 Introduction


Brooke and Cantor, Reconstructing Nature, Section 1

John Hedley Brooke, Science and Religion: Some Historical Perspectives, Chapters 1 and 2.
Jan. 18 The Search for a New Philosophy of Nature

Required:

Paul Oskar Kristeller, “Humanism,” in The Cambridge History of Renaissance Philosophy

And the section on “Natural Philosophy”

Burtt, The Metaphysical Foundations of Modern Science, Chapters I-III

Suggested:

Gary B. Deason, "Reformation Theology and the Mechanistic Conception of Nature," in Lindberg and Numbers, God and Nature

Jan 25 The Foundation of the Mechanical Philosophy: The Restoration of Ancient Atomism

Required:

Walter Charleton, Physiologia, Book I, Chaps. III, IV, V; Book II, Chaps. I, III, IV; Book III, Chaps. I, XV, and selected others

Suggested:

Robert Kargon, Atomism in England

Feb. 1 The Foundation of the Mechanical Philosophy: The Cartesian alternative

Required:
Descartes, Principles of Philosophy, Parts I and II (translated by Valentine Rodger Miller and Reese P. Miller)

Descartes, Discourse on Method

Burtt, Chapter IV

Suggested:

Daniel Garber, Descartes’ Metaphysical Physics

Peter Dear, Mersenne and the Learning of the Schools

Feb. 8 Divine Will and the Mechanical Philosophy

Required:


Suggested:

Francis Oakley, Omnipotence, Covenant, and Order

Feb. 15 Hobbes and the Danger of Materialism

Required:

Thomas Hobbes, De corpore, Parts II and IV
Burtt, Chapter V (pp. 126-134)

Suggested:

Frijthof Brandt, Thomas Hobbes' Mechanical Conception of Nature


Feb. 22 Physics and the Immortality of the Soul

Required:

Either, Kenelm Digby, The Second Treatise . . . in Two Treatises

Or, Walter Charleton, The Immortality of the Soul

March 1 Reading Week

March 8 Henry More and the Limits of Mechanism

Required:

Henry More, An Antidote Against Atheism

Burtt, Chapter V (pp. 140-161)

Suggested:
Alan Gabbey, "Henry More and the Limits of Mechanism" and


March 15 Boyle and Providential Natural Philosophy, I

Required:

Robert Boyle, A Free Enquiry into the Vulgarly Received Notion of Nature, Introduction and pp. 1-78

Suggested:


March 22 Boyle and Providential Natural Philosophy, II

Required:

Robert Boyle, A Free Enquiry into the Vulgarly Received Notion of Nature, pp. 79-165.

Burtt, Chapter VI

Suggested:

March 29 Boyle and the Limits of Natural Philosophy

Required:

Robert Boyle, A Discourse of Things above Reason

Richard S. Westfall, Chapters 5, 6, 7

Suggested:


Jan W. Wojcik, Robert Boyle and the Limits of Reason

April 5 Theology and Alchemy in Newton's Natural Philosophy

Required:

Dobbs and Jacob, Newton and the Culture of Newtonianism, Chapter 1

Burtt, Chapter VII

Suggested:

Richard S. Westfall, Never at Rest

April 12 The Leibniz-Clarke Correspondence

Required:

H. G. Alexander, ed., The Leibniz-Clarke Correspondence

Margaret C. Jacob, "Christianity and the Newtonian Worldview," in Lindberg and Numbers, God and Nature