

**History 2D Science, Magic and Religion, 1600-the present
Spring Quarter, 2005**

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Office hours: Thursdays 2-3:55 or by appointment

Lectures will be given on Mondays, Wednesdays, Fridays 11-11:50;

There is a dedicated web site and the password is magic; see www.

Required readings:

Margaret C. Jacob and Larry Stewart, *Practical Matter. The Impact of Newton's Science from 1687 to 1851*, Harvard University Press, 2004

Bruce Moran, *Distilling Knowledge : Alchemy, Chemistry, and the Scientific Revolution* (New Histories of Science, Technology, and Medicine), Harvard University Press, 2004

Eric Dorn Brose, *Technology and Science in the Industrializing Nations 1500-1914* (Control of Nature Series) (Available used from amazon.com)

Paul Josephson, *Totalitarian Science and Technology (Control of Nature Series)* Humanity Press
(also available used from amazon.com)

Week 1 Introducing the Pre-Modern Cosmology

On the course web site: Gary Ferngren, ed. *Science and Religion; read the introduction*, pp. [3-12](#), [33-46](#); and Oster, ed. pp. [8-15](#).

Lecture 1- [Powerpoint](#) | [PDF](#)

Lecture 2- [Powerpoint](#) | [PDF](#)

Film: Dr. Faustus (Based on the Christopher Marlowe play)

Week 2 Science as companion and antagonist of Magic;

Read the whole of the Moran book; and on the web: Paracelsus, from Osler, pp. [100-107](#)

Lecture 3- [Powerpoint](#) | [PDF](#)

Lecture 4- [Powerpoint](#) | [PDF](#)

Lecture 5- [Powerpoint](#) | [PDF](#)

Week 3 The Newtonian Synthesis

Read Jacob and Stewart, chapters one and two

On the web: Oster, ed. Science in Europe; texts by Newton, pp. [162-172](#)

Lecture 6- [Powerpoint](#) | [PDF](#)

Lecture 7- [Powerpoint](#) | [PDF](#)

Week 4 The Enlightenment and the repudiation and transformation of Magic

Jacob and Stewart, chapters 3, 4, and 5

On the web from Oster, pp. [184-198](#).

Lecture 8- [Powerpoint](#) | [PDF](#)

Lecture 9- [Powerpoint](#) | [PDF](#)

Friday April 29th MIDTERM No excuses without written evidence

Week 5 The Rise of the Occult and the Mystical

On the web: Winter, [Mesmerized](#) ; and Satter, [Each Mind a Kingdom](#); and on the web readings from Mary Baker Eddy and Madame Blavatsky

http://www.spirituality.com/dt/toc_sh.jhtml;jsessionid=FOSCXAOQOFNA1KGL4LYSFEVIZPZPAIV0 (read the first 5 chapters)

http://www.blavatsky.net/blavatsky/secret_doctrine/secret_doctrine.htm

Lecture 10- [Powerpoint](#) | [PDF](#)

Lecture 11- [Powerpoint](#) | [PDF](#)

Week 6 The Darwinian Synthesis

On the web: excerpts from Darwin, *The Origin of the Species*, pp. [205-33](#); Mark Ridley, ed. *The Darwin Reader*, pp. [145-161](#); and Ronald Number, *Darwinism Comes to America* (1999), pp. [1-48](#).

Lecture 12- [Powerpoint](#) | [PDF](#)

Lecture 13- [Powerpoint](#) | [PDF](#)

Friday, May 13- Film- "Angels and Insects"

Week 7 American Religiosity and the Rise of Technology

Lecture 14- [Powerpoint](#) | [PDF](#)

Lecture 15- [Powerpoint](#) | [PDF](#)

Brose, *Science and Technology in the Industrial Revolution* - to be read in full

Week 8 Einstein, Relativity and Relativism (the 100th anniversary)

Lecture 16- [Powerpoint](#) | [PDF](#)

Lecture 17- [Powerpoint](#) | [PDF](#)

Lecture 18- [Powerpoint](#) | [PDF](#)

<http://www2.rnw.nl/rnw/en/features/science/050103rf>

<http://www.aip.org/history/einstein/>

[Read both sites in full](#)

May 27 paper is due

Week 9 Technology as Divinity

Josephson *Totalitarian Science and Technology* (all)

On the web: Margit Szöllösi-Janze, [A National Socialism and the Sciences: Reflections, Conclusions and Historical Perspectives](#)@ from her edited book, *Science in the Third Reich*, 2001.

Lecture 19- [Powerpoint](#) | [PDF](#)

Lecture 20- [Powerpoint](#) | [PDF](#)

Week 10 Anti Science and the Rise of the Irrational

on the web: Robert Park, *Voodoo Science. The Road from Foolishness to Fraud* (2000), pp. [3-67](#)

Lecture 21- [Powerpoint](#) | [PDF](#)

assignment for the week as well: find a web site that is promoting pseudo-science

Attendance will be taken.

There is a five - seven page paper due on May 27 focused on one of the figures we have discussed, from the early natural philosophers through to the Los Anamos project. Portions of four films will be shown and these will be part of the material that can be examined: Dr Faustus; Mesmerism; Angels and Insects; Fat Man and Little Boy.