History 371-01 Dr. M. J. Osler Office: Social Sciences 636 Telephone: 220-6414/6401 e-mail: mjosler@ucalgary.ca Office Hours: MWF 10-11, or by appointment U. of. C. Fall 2007

History of Magic, Science, and Religion

This course embarks on an historical study of the development of and relationships among three worldviews by which Europeans have sought to understand the universe and human nature. Starting from late antiquity, the course will include the following topics: early Christianity and the natural world, the development of witchcraft, Christian responses to Greek science and philosophy, Hermetic magic in the Renaissance, and the Trial of Galileo.

Course Requirements and Grading

Course Requirements

1. Examinations

There will be a one-hour mid-term test and a two-hour final examination. Mid-term test: **Friday, November 2.** Final examination: To be scheduled by the Registrar Examinations will be based on both readings and lectures. The final will be cumulative.

2. Term Papers

 (a) Minimum 2500 words (10 double-spaced typed pages or the equivalent). Outlines and bibliographies must be handed in no later than Friday, October 26. No paper will be accepted or graded until and outline and bibliography have been received, commented upon, and returned to the student. Papers are due <u>NO</u> <u>LATER THAN</u> Friday, November 30. Lateness will be penalized: for each day that the paper is late, the grade will drop by one step (e.g. A to A-, etc.).

ALL PAPERS MUST CONFORM TO THE *Department of History Essay Guide*, which is available in the bookstore and on the History Department's Home Page (<u>http://hist.ucalgary.ca/</u>) Be sure to read the section on plagiarism (<u>http://hist.ucalgary.ca/essay/EssayGuide.htm#plag</u>) 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. Academic dishonesty is a serious offence that can lead to a failing grade and/or expulsion from the University.

(b) Paper topics: Papers must deal with the relationship between at least two of the three areas (magic, science, religion) in the thought of an individual who lived

and wrote in the period covered by the course (approximately 300 A.D. through 1630 A. D.). Research for the paper must be based on the student's reading of the individual's own writings.

Evaluation of Course Work

Mid-term test (15%) Outline and Bibliography (10%) Term Paper (40%) Final Examination (35%) To be scheduled by the Registrar

N.B. All assignments must be completed in order to pass the course.

Textbooks (available in the Bookstore):

Edward Grant, Science and Religion, 400 B.C. – A. D. 1550: From Aristotle to Copernicus
(Westport, Connecticut: Greenwood Press, 2004)
Jeffrey B. Russell, A History of Witchcraft: Sorcerers, Heretics and Pagans (London: Thames
and Hudson, 1997)
Gary Ferngren, editor, Science and Religion: A Historical Introduction (Baltimore: Johns
Hopkins University Press, 2002)
Anthony Grafton, New Worlds, Ancient Texts: The Power of Tradition and the Shock of
Discovery (Cambridge, Mass.: Harvard University Press, 1992)
Arthur Koestler, The Sleepwalkers (Penguin, 1999)

Useful Books Available in the Library

These books contain lots of potential term-paper topics and bibliographical references. Consult them if you are searching for ideas or want to pursue some topic in greater depth.

Jeffrey B. Russell, Witchcraft in the Middle Ages
Roger French and Andrew Cunningham, Before Science: The Invention of The Friars' Natural Philosophy
Frances Yates, Giordano Bruno and the Hermetic Tradition
Richard S. Westfall, Essays on the Trial of Galileo
Kenneth Howells, God's Two Books: Copernican Cosmology and Biblical Interpretation in Early Modern Science (University of Notre Dame Press, 2002)
Annibale Fantoli, Galileo: For Copernicanism and for the Church, second edition
William R. Newman, Promethean Ambitions: Alchemy and the Quest to Perfect Nature (Chicago: University of Chicago Press, 2004)
David C. Lindberg, The Beginnings of Western Science (Chicago: University of Chicago Press, 1992).
Brian Vickers, editor Occult and Scientific Mentalities in the Renaissance
Patrick Curry, editor, Astrology, Science and Society

For more detailed references, see HST database, available through the library website under "Electronic Resources".

Lecture Topics and Reading Assignments

The assigned reading for each week is required, and you will be expected to be familiar with it on exams. The Suggested readings are just that, Suggested. They are there to consult if you are particularly interested in a topic. There is no obligation to read them.

September 10: Introduction

Assigned:

Grant, Chapters 1 and 2

Colin A. Russell, "The Conflict of Science and Religion," in Gary Ferngren, editor, *Science and Religion: A Historical Introduction*David B. Wilson, "The Historiography of Science and Religion," in Gary Ferngren,

editor, Science and Religion: A Historical Introduction

September 17: Greeks and Hebrews

Assigned:

Grant, Chapter 3 Edward Grant, "Aristotle and Aristotelianism," in Gary Ferngren, editor, *Science and Religion: A Historical Introduction*

September 24: Medieval Witchcraft: Theologians and Inquisitors

Assigned: Russell, Chapters 1 and 2 Suggested: Jeffrey B. Russell, *Witchcraft in the Middle Ages*

October 1: Medieval Witchcraft: Popular Culture and Persecution

Assigned: Russell, Chapters 3 and 4 Suggested: Norman Cohn, *Europe's Inner Demons*

October 8: The Middle Ages: Science as Handmaiden

Assigned:

Grant, Chapters 4 and 5; selection by Roger Bacon David C. Lindberg, "Early Christian Attitudes toward Nature," in Gary Ferngren, editor, *Science and Religion: A Historical Introduction*

Suggested:

David C. Lindberg, "Science as Handmaiden: Roger Bacon and the Patristic Tradition," *Isis*, 1987, 78: 518-536.

October 15: The Making of Medieval Natural Philosophy—Christianity Confronts Greek Philosophy

Assigned:

Grant, Chapters 6; selections by Giles of Rome, Saint Bonaventure, and Saint Thomas Aquinas

Alnoor Dhanani, "Islam," in Gary Ferngren, editor, Science and Religion: A Historical Introduction

Suggested:

Roger French and Andrew Cunningham, *Before Science: The Friars' Natural Philosophy* Gordon Leff, *Paris and Oxford Universities in the 13th and 14th Centuries*

October 22: Natural Philosophy and Natural Theology in the Middle Ages

Assigned:

Grant, Chapters 7 and 8; selections by Albert of Saxony and Nicole Oresme Lindberg, "Medieval Science and Religion," in Gary Ferngren, editor, *Science and Religion: A Historical Introduction*

Suggested:

Nicholas H. Steneck, *Science and Creation in the Middle Ages* Edward Grant, *God and Reason in the Middle Ages*

Outlines and Bibliographies due Friday October 26.

October 29: Renaissance Humanism—The Search for Ancient Origins

Assigned:

Grafton, Chapters 1 and 2 Suggested: Frances Yates, *Giordano Bruno and the Hermetic Tradition*

Midterm Exam—Friday November 2

November 5: Hermes Trismegistus and the Rise of High Magic

Assigned:

Grafton, Chapters 3 and 4 Suggested: Brian Vickers, editor, *Occult and Scientific Mentalities in the Renaissance*

November 12: Alchemy and Astrology in the Renaissance

Assigned: Grafton, Chapter 5 Suggested: Jim Tester, History of Astrology
Patrick Curry, editor, Astrology, Science and Society
Eugenio Garin, Astrology in the Renaissance: The Zodiac of Life
William R. Newman, Promethean Ambitions: Alchemy and the Quest to Perfect Nature

November 19: The Reformation and the Witchcraze

Assigned:

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Russell, Chapters 4, 5, and 6

Suggested:

Andrew Cunningham and Ole Peter Grell, *The Four Horsemen of the Apocalypse: Religion, War, Famine, and Death in Reformation Europe* Keith Thomas, *Religion and the Decline of Magic*

November 26: The Copernican Revolution

Assigned:

Koestler, Parts 3 and 4

Owen Gingrich, "The Copernican Revolution," in Gary Ferngren, editor, Science and Religion: A Historical Introduction

Suggested:

Thomas S. Kuhn, The Copernican Revolution

Kenneth Howells, God's Two Books: Copernican Cosmology and Biblical Interpretation in Early Modern Science

Term Papers Due Friday November 30

December 3: Galileo and the Church

Assigned:

Koestler, Part 5

Richard J. Blackwell, *Galileo Galilei*, in Gary Ferngren , editor, *Science and Religion: A Historical Introduction*

PLAGIARISM

Plagiarism occurs when one submits or presents one's work in a course, or ideas and/or passages in a written piece of work, as if it were one's own work done expressly for that particular course, when, in fact, it is not.

As noted in the **Department of History Guide to Essay Presentation**, plagiarism may take several forms:

- Failure to cite sources properly may be considered plagiarism. This could include quotations, and wording used from another source but not acknowledged.
- Borrowed, purchased, and/or ghostwritten papers are considered plagiarism, as is submitting one's own work for more than one course without the permission of the instructor(s) involved.
- Extensive paraphrasing of one or a few sources is also considered plagiarism, even when notes are used, unless the essay is a critical analysis of those works.
- The use of notes does not justify the sustained presentation of another author's language and ideas as one's own.

Plagiarism is a serious academic offence. A plagiarized paper will automatically be failed. Plagiarism may also result in a failing grade for the entire course and other penalties as noted in <u>The University of Calgary Calendar</u>.

Social Science Faculty Rep. Phone: 220-6551/Rm. MSC 251 SAFEWALK/Campus Security: 220-5333

DISABILITY RESOURCE CENTRE

It is the student's responsibility to request academic accommodations. If you are a student with a documented disability who may require academic accommodation and have not registered with the Disability Resource Centre, please contact their office at 220-8237. Students who have not registered with the Disability Resource Centre are not eligible for formal academic accommodation.

You are also required to discuss your needs with your instructor no later than fourteen (14) days after the start of this course.