

2/14/2008

Comparative Studies 170: Science and Religion

[GEC Category 5.B.3: Arts & Humanities: Cultures and Ideas]

Instructor:

COURSE DESCRIPTION:

This course is designed to encourage students to think critically about major issues in the intersection of philosophy, science and religion. More specifically, this course will concentrate upon three seminal issues in the history of science and theology: Creation of the universe, as reflected in Scripture and in contemporary astrophysical theory; The Decentering of the earth in astronomical and theological theory, as reflected in the Copernican revolution and in recent Hubble research; The Decentering of human beings, as reflected in the continuing conflict between Darwinian evolution and creationism.

The course will be lecture format with discussion sections.

COURSE OBJECTIVES and ASSESSMENT:

The aim of this course is to equip students with the means to arrive at their own reflective equilibrium concerning the deep metaphysical, ethical and methodological issues involved in assessing the relationship between science and religion. Students will be expected to acquire an analytical understanding of these issues and the principal arguments in favor of the various theses held in connection with them. Students will also be expected to learn how to critically analyze and assess differing positions, develop arguments in favor of their own views on them, and to learn how to express these views clearly in discussion and in writing.

TEXTBOOKS

Textbooks will be available at SBX Bookstore. Copies of the books will also be placed on reserve at the Sullivant Undergraduate Library (SL).

Drake, trans, *Discoveries and Opinions of Galileo*

S. McGrath, *Science and Religion*

Pigliucci, *Denying Evolution: Creationism, Scientism and the Nature of Science*

M. Ruse, *Can a Darwinian be a Christian?*

O. Gingerich, *God's Universe*

M. Shelley, *Frankenstein*

Selected articles will be put on CARMEN

COURSE REQUIREMENTS:

1. mid-term exam (30%) – scheduled for 1st meeting of week 6.
2. in-class comprehensive final exam (40%).
3. a 1500 word (5pp) paper (20%) – scheduled for 2nd meeting of week 8.
4. class participation in recitation (10%).

Academic Misconduct and Disability Services Statements:

Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. Please contact the Office for Disability Services at 614-292-3307 in room 150 Pomerene Hall to coordinate reasonable accommodations for students with documented disabilities.

Academic misconduct will be treated seriously in this course. See OSU rules for academic misconduct. Per university policy, offenders will be reported to the committee on academic misconduct. If you need more guidance, take a look at : <http://oaa.osu.edu/coam/faq>

(TENTATIVE) SCHEDULE OF READINGS:**I. Introduction: Methodological Issues (Weeks 1-2)**

Topics to be discussed: what methods do we use to ascertain religious and scientific truth? What are their epistemological underpinnings? Can the methods used by the disciplines be reconciled? If not, why not?

McGrath, ch 1-3

Genesis 1-2

Popper "On Scientific Method", (on reserve)

Kuhn, selection from "The Nature of Scientific Revolutions" (on reserve)

II. Cosmology and theology (weeks 3 - 4)**Week 4: The Argument from design**

Topics to be discussed: Does the argument from Design, as introduced by Aquinas, and elaborated by Paley, and most recently Behe, work? What are the strengths and weaknesses of the argument?

Aquinas, "The Five Ways"

Paley, Natural Theology (selection on reserve)

Behe, Darwin's Black Box (selection)

McGrath chapter 4

Week 5: God and Science -- The Medieval Tension

Topics to be discussed: How did medieval philosophers reconcile the science of their day (Aristotle) with their respective religious account? Is this process defensible? One of the medievals will be chosen for discussion (from Maimonides; Aquinas, or Ibn Rushd) and the text put on CARMEN

Aristotle on creation (brief selections from Aristotle's "On the Heavens"; "Physics")

Maimonides on creation, The Guide for the Perplexed, Pt III ch 13-30

OR Aquinas, On the Eternity of the World

OR Ibn Rushd, Tahafut al-Tahafut (chapter 13, on the eternity/creation of the world)

McGrath, ch 5

III. Aristotle, Astronomy and the Church: The Galileo Affair (week 6)

Topics to be discussed: What is the "Galileo Affair" and what is its relevance to the 'science-religion' story? How did Galileo try to reconcile his new astronomy with accepted teachings of the Church? How did he appropriate biblical hermeneutics to his task?

Galileo Galilei, "Letter to Grand Dutchess Christina" in Drake

Drake, introductory sections to "Letter on Sunspots" in Drake

IV. Darwin and Creationism: Historical Underpinnings (week 7)

Topics to be discussed: How did Darwin introduce and position his new science of evolutionary biology? How aware was he of the religious implications of his new research?

What did he have to say about the accommodation of evolution to Christian theology?

McGrath, ch 8;

Pigliucci chapters 1-4

Darwin, "Origin of the Species" (selections available on=line and on CARMEN)

V. Contemporary Reactions to Darwin and Evolution (week 8)

Topics to be discussed: How has Darwin been both demonized and lionized in contemporary scientific and religious circles? What is so threatening about the implications of Darwinian thought? Students will have a choice of articles to read, including but not limited to --

Pigliucci, *Denying Evolution: Creationism, Scientism and the Nature of Science*, ch 5-8

M. Ruse, *Can a Darwinian be a Christian?*

Gould, *Rocks of Ages*

Selections of online websites (Discovery website: National Academy of Sciences)

VI. Religion, Science, and Philosophy: tension and/or accommodation (weeks 9 and 10)

Topics to be discussed: What can we learn from these snapshots of the science/religion divide? Is there a way these fields can be reconciled, or is there an irreconcilable divide between the two? How did Mary Shelley view the tensions, and how are they reflected in her characterization of Dr. Frankenstein? What are the contemporary implications of Shelley's characterization?

Gingerich, God's Universe

McGrath, ch 9.

Mary Shelley, Frankenstein