Science and Religion: A Philosophical Analysis

Course Number: Phi 81.1

Institution: St. John's University

Instructor: Marie George

Course Outline and Reading List (subject to revision):

I. INTRODUCTION

- Students will be asked to write out their views on the relation of religion and science.

- Instructor will present various positions taken by scientists.

Readings:

Einstein, "About Religion"

Aristotle on the Virtue of Religion

Suggested reading: Cosmos, Bios, Theos.

II. THE SCIENTIFIC METHOD AND ITS SCOPE: AN OVERVIEW

A. General considerations regarding method

Readings: Aristotle: Nicomachean Ethics 1098a28-b5, 1094b24; De Caelo 306a; Physics 193b33; Parts of Animals, Bk. I, c. 1; Metaphysics, Bk. II, c. 3.

B. The scientific method as developed and used in Physics (the hypothetical deductive method)

1. the scientific observation

2. laws; statistical laws

3. hypotheses and theories

Readings: 3 handouts

C. The scientific method and biology

Reading: Handout

D. Science, Natural Philosophy, and Metaphysics: a comparison of method and objects of study

Readings:

Handout

Excerpts from Aquinas’s commentary on Boethius *De Trinitate*, qq. 5 & 6.


E. Science and Theology:

Readings:

*Summa Theologiae*, I.1, articles 2, 7, 8. (Theology as science)


Thomas Aquinas, *Summa Theologiae*, I, 70.1 ad 3; *Summa Contra Gentiles*, Bk. II, art. 4.


*Catechism of the Catholic Church*, #115-119 (Senses of scripture)

F. Science and Ethics:

1. Is there such a thing as "value-free" science?

Reading:

Albert Einstein, *Out of my Later Years*, 113.

Suggested reading:


2. Does Science have a role in determining morality?
Readings:

Michael Ruse and E.O. Wilson, "The Evolution of Ethics" (313-317)


William Provine, "Evolution and the Foundations of Ethics."

Rebecca Messall, "The Evolution of Genocide."

Paul Vitz, "The Psychology of Atheism."

III. THE CHURCH AND SCIENCE: HISTORICALLY FRIENDS OR FOES? (4 classes)

A. Church in regard to science:

1. Other worldliness and a progressive vision of time


2. The Church as defender of rationality and civilization

Readings:

Handout: Thomas Cahill, How the Irish Saved Civilization.


Homework: What criteria does one use to distinguish a cult (in the sense of a religion regarded as spurious) from a legitimate religion?

3. Galileo

Readings:

Galileo, “Letter to Castelli.”
Cardinal Bellarmine, letter.

4. Has the Church in any age ruthlessly attacked scientific inquiry?

Reading: Excerpts from Hitchcock, "Inquisition," and Marvin R. O'Connell, "The Spanish Inquisition: Fact or Fiction"

Suggested readings:

Andrew Dickson White, A History of the Warfare of Science with Theology in Christendom.


5. The traditional view of man in the world in the face of the Copernican revolution

Readings:

Aristotle, De Caelo, Bk. I, cc. 2 & 3; Parts of Animals, Bk I, c. 5; Nicomachean Ethics, Bk. VI, c. 5.

6. Church moral teaching and scientific experimentation [dissection of the human body; experimentation on animals; reproductive technologies]

Readings:


Suggested reading:


7. Creation Science, evolution, and Church teaching

Readings:

Pius XII, “Humani Generis”, # 36. (#37 polygenism)


Catechism of the Catholic Church, #362-368.
B. Science in regard to the Church and religion:

1. Science as a complement to faith: Keplar, Boyle, Newton

Readings:


Homework assignment on the above article by Buckley.

Handout: Is it Reasonable to go beyond the God of the Philosophers?


2. Science as a replacement for religion: A surer path to God than religion?

Readings:

Thomas Paine, excerpts from Age of Reason.

Thomas Aquinas, Summa Contra Gentiles, Bk. II, cc. 2, 3.

3. The Masters of the Universe mentality

Readings:

Sam Keen, Apology for Wonder, c. 5, “The Travail of Homo Faber.”

Joseph Cardinal Ratzinger, In the Beginning..., 44-53.

Suggested readings:


4. Reductionism and the denial of the reality of non-material entities

Readings:

Thomas Aquinas: Summa Theologiae Bk. I, 84.2 and 84.7 (imagination); Disputed Question on the Soul, art. 14;


5. Interpretations of quantum mechanics and rationality

N.B. This section will probably not be covered due to time restraints and the difficulty of the topic.

Readings:


IV. PROBLEMS OF ORIGINS

A. The Origin of the Universe - Does the Universe have a beginning in time? (1 class)

1. Scientific problems w/ determining whether the Big Bang was an absolute beginning

Suggested reading: M.A. Corey, God and the New Cosmology, 135-137.

2. Pre-scientific positions on the eternity of the world (Aquinas, etc.)

Reading: William Carroll, "Aquinas and the Big Bang."

B. The Origin of Life - A product of chance and necessity or intelligent design?

1. History of the argument from design


2. The champion of the argument from design: William Paley

Readings:

Michael Behe, Darwin’s Black Box, 213-216.

William Paley, Natural Theology, cc. 1-3.

3. David Hume: Did he lay to rest the argument from design?

Readings:

Suggested reading:

David Hume, *Dialogues concerning Natural Religion*.

4. Darwin and Richard Dawkins: Natural Selection takes over the Designer’s job

Readings:


Michael Behe, *Darwin’s Black Box*, 219-221.

5. Is Cosmic Teleology nonsense?

Readings:


Robert Spencer, "On Speciesism"

C. The Origin of Human Life - Was the universe from its inception ordered to the apparition and sustenance of intelligent life? The Anthropic Cosmological Principle (3-4 classes)

1. The evidence

Reading: Hugh Ross - Design and the Anthropic Principle (summary)

2. The questions the evidences raises, and especially the relation of the various formulations of the ACP to the argument by design

Readings:

Marie I. George, O Wonder! O Brave Old Universe that has Such People in It! Reflections on M.A. Corey’s *God and the New Cosmology*.

Howard J. Van Till, "Why does the Universe...."

Handout:
3. Extraterrestrial life

Readings:


Christian De Duve, Vital Dust, excerpts.

Final class to synthesize and summarize.