I. **COURSE TITLE:** Science and Faith

II. **LANGUAGE OF INSTRUCTION:** English

III. **AUDIENCE:** VERITAS CHRISTIAN STUDY ABROAD STUDENTS

IV. **CONTACT HOURS:** 45

V. **GENERAL COURSE DESCRIPTION AND OBJECTIVES**

This course is intended to study and critique philosophically the relationship between the natural sciences and religion. A variety of interpretations will be examined. We will take a historical look at the methods and pedagogues in various areas within the natural sciences and how they compare with those in religion, including a look at the new *Intelligent Design* movement. Our journey will lead us to emphasize on modern day beliefs and theories, in particularly, in cosmology and evolution and their relationship with and impact on Religion. Recent developments in science (such as cloning, human genome research and the accelerated expansion of the universe) and their impact on theology will be emphasized. Diverse viewpoints will be discussed and critiqued.

**Goals:**

1. To compare and evaluate the various methods used in science and religion.
2. To survey, compare, and evaluate the various models used in the interaction between science and religion (e.g., conflict, independence, dialogue, integration).
3. To familiarize oneself with a broad range of modern topics and developments in natural sciences in particular, in the physical sciences and how they effect or influence religious view points.
4. To test the integrability of science with theology.
5. To inquire into the basis of the apparent conflicts between science and religion.
6. To survey and compare the past and present relationships between science and religion.
7. To develop critical thinking.
8. To challenge students to function and adjust their thought processes in an interdisciplinary study.

Along with the obvious intent to compare the methods of science and religion, the science and religious content and historical aspects within the course are substantial. This course contains a very broad survey of modern topics in the natural sciences (in particular, genetics, cloning, evolution, earth science, astronomy, cosmology, special and general relativity, chaos, and quantum mechanics) to be integrated with biblical studies.

VI. **COURSE PRE-REQUISITES:** NONE

VII. **REQUIRED READINGS AND TEXTS**

- **Papers:** Lynn White Jr., ‘The Historical Roots of our Ecological Crisis’ in *Science* 155 (1967), pp.1203-1205
- Peter Harrison, ‘The Bible and the Emergence of Modern Science’ available at [http://tinyurl.com/peterharrison](http://tinyurl.com/peterharrison)

VIII. **Course Calendar**

<table>
<thead>
<tr>
<th>Date</th>
<th>Teaching Topic</th>
<th>Covering</th>
<th>Reading</th>
<th>Misc.</th>
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</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>The Nature of Faith</td>
<td>Faith as such: Vice/Virtue?</td>
<td>McGrath 1, 22-24</td>
<td>tinyurl.com/JCldoubt</td>
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<td>The idea/irony of Memes Scepticism &amp; Suspicion</td>
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<td>Week 2</td>
<td>The Nature of Science</td>
<td>The problem of Knowing</td>
<td>McGrath 7,9,10</td>
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<tr>
<td>Week</td>
<td>Topic</td>
<td>Reading Material</td>
<td>References</td>
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<td>3</td>
<td>The problem of Nature</td>
<td>The problem of Knowers</td>
<td>Lennox 1-2</td>
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<td>4</td>
<td>Models of Interaction</td>
<td>Barbour’s 4 models Reasons for conflict Removing confusion</td>
<td>Barbour 1</td>
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<td>McGrath 6,17</td>
<td>Alexander 3,7</td>
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<td>5</td>
<td>Cosmology</td>
<td>Cosmos/chaos/chance In the beginning... Anthropic arguments</td>
<td>Barbour 2</td>
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<td>McGrath 14,19</td>
<td>Lennox 4</td>
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<td>6</td>
<td>Biology</td>
<td>The Blind Watchmaker The Language of God Convergent Evolution</td>
<td>Barbour 4</td>
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<td>McGrath 18,21</td>
<td>Lennox 6-8</td>
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<td>7</td>
<td>Anthropology</td>
<td>The Ecological Crisis Man and the Animal Evolution as a Humbler</td>
<td>Lynn White Jr.</td>
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<td>Selfish Green</td>
<td>Alexander 9,14</td>
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<td>8</td>
<td>Class Presentations</td>
<td>Survey 2 blind alleys &amp; 2 fruitful avenues in Christian apologetics</td>
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<td>9</td>
<td>The Fall &amp; Providence</td>
<td>The Is-Ought Problem The appeal of Creationism The confusion about “ID”</td>
<td>McGrath 11,12</td>
<td>Lennox 9-11</td>
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<td>10</td>
<td>Incarnation &amp; Eschatology</td>
<td>Determinism/Intervention Lux Mundi &amp; de Chardin The Resurrection of Jesus</td>
<td>Barbour 6</td>
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<td>McGrath 25-33</td>
<td>Lennox 12</td>
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<td>11</td>
<td>The Protestant Reformation</td>
<td>Augustine v Aristotle Allegory + ‘the Two Books’ Re-enchantment of nature</td>
<td>Peter Harrison</td>
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<td>Alexander 8</td>
<td>Barbour 6</td>
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<td>TBC</td>
<td>Term Paper Tutorials</td>
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**IX. EVALUATION CRITERIA**

5%   *Class attendance and active participation*

10%  *Book Review* (2-3 sides of A4) a section/chapter of John Lennox’ *God’s Undertaker* (due 29 Jan)

25%  *Class presentation* surveying 2 blind alleys & 2 fruitful avenues in Christian apologetics (21 Feb)

60%  *Term Paper*: 1500-3000 words on approved topic related to course, double spaced, due 16 Mar

**X. ATTENDANCE POLICY**

Attendance: Class attendance accounts for 5% of the grade. Students are expected to attend ALL class sessions. ALL absences (even “excused” absences) will negatively affect the grade for the course. Students are responsible for assignments and information provided to the class during an absence. Students are expected to arrive on time, and to remain until class has been dismissed, and anything less will be considered an absence.

**XI. DESCRIPTION OF SPECIAL ASSIGNMENTS/ACTIVITIES**

**Paper Descriptions:** The objective of the papers are to give a formal avenue for students to demonstrate their knowledge, research abilities, comprehension, and ability to justify and support conclusions pertinent to the subject matter being studied. The papers will require some research and are in most cases a summary or review in content, appearance, and style. Students may collaborate with one another. The final product must, however, be the student’s own original work.

**ESSAY SUGGESTED TITLES**

- “Faith is Blind, Science is Evidence Based” - Discuss
- Reductionism: do Genes and Memes tell the Meaning of Life?
- To what extent does Ben Stein’s *Expelled* exploit a postmodern critique of scientific realism?
• Is science a kind of salvation? Explain your answer with reference to the Fall.
• What are the ontological and teleological implications of “Big Bang” Cosmology?
• Is cosmic fine tuning best explained by chance, necessity or design?
• Does “the evidence for evolution reveal a universe without design”?
• Do Christians bear a “huge burden of guilt for the ecological crisis facing our world”?
• Is Intelligent Design sub-biblical?
• Is Darwinism more problematic for the Christian doctrine of creation or fall?
• What implications has the idea of God’s providence had for the natural sciences?
• To what extent is modern science a triumph of Augustine over Aristotle?
• What is nature? Are miracles violations of the laws of nature?
• Write a theological exposition of Psalm 8 or John 1:1-11

Bibliography:

Published Resources:


[Transcript Provided by California Baptist University]
Funkenstein, Amos, *Theology and the Scientific Imagination from the Middle Ages to the 17th Century* (Princeton University Press, 1862)


Klaaren, Eugene, *Religious Origins of Modern Science*


Matthews, Clifford N., and Varghese, Roy Abraham, *Cosmic Beginnings and Human Ends: Where Science and Religion Meet*


Pannenberg, Wolfhart. *Theology and the Philosophy of Science*

Peacocke, Arthur, *Creation and the World of Science*


Peters, Ted, ed. *Cosmos as Creation*

__________, *Playing God?: Genetic Determinism and Human Freedom* (Routledge, 1997).


Polkinghorne, John C. *Belief in God in an Age of Science*. Terry Lectures (Yale University Press, 1998).


Russell, Robert John, William R. Stoeger and George V. Coyne, eds., *Physics Philosophy and Theology*.


Video Resources:

“Contact”
“Gattaca”
“Touched by an Angel” (Episode: “Bringer of Light”; A 15-year-old girl (Amanda Fuller) attempts to prove that God exists in order to give hope to her cancer-stricken mother and her science-minded father (Arye Gross), who doesn’t believe in God.) Originally aired on CBS on Sunday, February 11, 2001.
“Faith and Reason”
“The Philosophy of Science”
“A Brief History of Time”
“The Mechanical Universe” series
“Universe: The Infinite Frontier” series
“Cosmos” (Carl Sagan)
“The Theories of Physics”
“From Particles to Waves: Electrons and Quantum Physics”
“About Time”
“Structure of the Atom”
“Wave-particle Duality”
“The MacLaughlin Group” on Genetic Engineering first aired August/September 1998

Web Resources:

American Association for the Advancement of Science: Program on Dialogue Between Science and Religion <www.aaas.org/spp/dspp/dbsr/>
American Scientific Affiliation (ASA) <asa.calvin.edu/ASA/>
C. S. Lewis Foundation <www.cslewis.org>
Center for Faith and Science Exchange (FASE) <www.ctel.net/~keggi/fase/index.html>
Center for Research in Science <cris.apu.edu>
Center for Theology and the Natural Sciences <www.ctns.org>
Counterbalance <www.counterbalance.org>
John Templeton Foundation (JTF) <www.templeton.org>
Meta listserv <www.meta-list.org>
Philadelphia Center for Science & Religion <www.pc4rs.org>
Science & Spirit <www.science-spirit.com>
Southern California Science Consortium of Christian Colleges and Universities <I will fill-in>
Vatican Observatory Research Group at Tucson <clavius.as.Arizona.edu/vo/>