

PAR 326-01 Religion and Science: God's Law and Laws of Nature Spring 2007
Inquiry Instigator: Prof. Daryl L. Hale Email: dhale@wcu.edu Office: ST 230
Office hours: MW 9-11, 12-2; TR 11:30-12:30, 2-3

This course satisfies the P3 History Perspective of the Liberal Studies program. Accordingly, we will read examine some key persons, episodes, and cultural forces and philosophical and religious movements that shape the institutions, knowledge, and value systems emerging with the advent of modern science. We will commence with the conflict between Galileo and the church, consider Newton's defense of a mechanistic universe, and reflect on the controversy surrounding Darwin's evolutionary biology. After considering those historical landmarks of the conflict model of religion & science interaction, we will examine some of the complexities of both religion and science and raise the question of whether God can be known from nature, as natural theologians have thought. Then, for the last half of the course, we will study 2 contemporary texts that take 2 very different approaches to the possibility of reconciliation between religion and science: one an Anglican priest-physicist who sees both as complementary, and the other a methodological naturalist who sees no need for God in scientific theorizing. I leave it up to you to decide who presents the better case (if either does).

COURSE OBJECTIVES:

- 1. Historical Discernment:** Sensitivity to historical & cultural forces that have created impasses or openness in dialogues between religion and science
- 2. Critical Reasoning:** Enhanced ability at analyzing & assessing key arguments, hidden assumptions, faulty reasoning, & at constructing coherent, valid arguments
- 3. Moral Reflection:** Recognition of disguised or spurious moral, political or theological implications held by scientists and theologians
- 4. Diligent Reading:** Enhanced proficiency at reading complex texts for the simple structure of philosophical argument embedded in the narrative

Schedule of Readings and Topics for the Course:

- I. Religion and Science: Inevitable Conflict or Seamless Harmony?**
January 9 -- Introduction: Confrontational models of Science-Religion interaction – the Draper-White conflict thesis; the Merton harmony thesis; Q1: Is Religion an Ally or Enemy of Science? Q2: Is Skepticism (or, Critical Scrutiny) always aimed at discrediting Religion? Q3: Must a Scientist, especially a Darwinist, be an Atheist or Metaphysical Naturalist? Q4: Can a modern Theologian, or even a reflective Christian, incorporate the insights of modern Science into his/her Theology? Q5: What non-confrontational models of Science-Religion interaction might be proposed?
- II. Historical Background: Landmark Debates in Religion and Science**
- A. Emergence of Modern Science from Medieval Synthesis of Theology & Natural Science**
11 -- “The Medieval Synthesis” [McGrath 1-6]
- B. ‘And New Philosophy Calls All in Doubt’ – the New Astronomy: Copernicus’ *De Revolutionibus* and Galileo’s Copernicanism**
11 -- “The New Astronomy”: The Copernican and Galileian Controversies” [AM 6-15]; Copernicus: Preface to *De*

Revolutionibus; Galileo: *Letter to Grand Duchess Christina* [handouts; also the evening of Jan 11, we will watch the video, *Galileo's Battle for the Heavens* based on Dava Sobel's book, *Galileo's Daughter*, presenting interviews with several renowned historians and philosophers of science.]

- C. **Laws of Nature, Light of Newton, Clockwork Universe of Deism**
11 -- "The Mechanistic Universe: Newton and Deism" [AM 16-21];
Osler: "Mechanical Philosophy" [handout, Ferngren 43-51]
- D. **Darwin, Neo-Darwinism, and Rejection of Teleology & Creationism**
11 -- "The Origins of Humanity: The Darwinian Controversy" [AM 21-26]; Gould: Preamble to *Rocks of Ages*; Darwin: passages from *Autobiography* [handouts]
- III. **Prolegomena and Complications to Clarify before answering Q1-Q5**
- A. **Problems with treating Religion and Science as Uniform/Monolithic**
16 -- Definitions and Varieties within a Religion: Liberal Protestantism, Modernism, Neo-Orthodoxy, Evangelicalism; Non-confrontational models of Science-Religion interaction [AM 28-44; 49-54]
- B. **Philosophy of Science as related to Religion & Theology**
18 -- Rationalism v. Empiricism, Realism v. Idealism, Duhem-Quine thesis [AM 57-71]
23 -- Logical Positivism's Verification criterion, Popper's Falsification criterion, Kuhn's *Structure of Scientific Revolutions & Paradigm shifts*, Polanyi's *Personal Knowledge*, Feyerabend's *Science in a Free Society*
- C. **Insights of Natural Sciences & Implications for Philosophy of Religion**
25 -- Philosophical & Scientific Arguments for God's existence; Deism, Thomism, Process Theology [AM 88-109]
- D. **Natural Theology: Can God be known from Nature?**
30 -- "Natural Theology: Finding God in Nature" [AM 128-42]
- IV. **Two Diverse Responses to Modern Science: Critical Theological Realism and Methodological Naturalism**
- A. **John Polkinghorne's Critical Theological Realism: *Faith, Science & Understanding***
- February 1 -- Polkinghorne: "Theology in the University" [JP 3-26]
6 -- "Motivations for Belief" [27-51]
8 -- "The Role of Revelation" [52-65]
13 -- "Design in Biology" [66-77]
15 -- "Second Thoughts" – Critical Realism, Anthropic Principle, Panentheism, Monism, Chaos Theory [78-101]
20 -- God and Nature: Kenotic Creation & Divine Action [105-129]
22 -- "Natural Science, Temporality, Divine Action" [130-52]
27 -- "Science and Theology in England" [195-206]

March	1 --	<u>MIDTERM EXAM:</u>	Review terms, philosophical positions & principles (rationalism, empiricism, realism, idealism, natural theology, Deism, Thomism, CTR, anthropic principle, falsification & verification principles)
	5-11 --	<u>NO CLASS:</u>	<u>Spring Break</u>
	B.	Niall Shanks' Methodological Naturalism: <i>God, the Devil, and Darwin</i>	
	13 --	Shanks:	Dawkins' foreword, Shanks' preface & introduction [GDD vii-x, xi-xiii, 3-18]
	15,20 --		Evolution of Intelligent Design Arguments [19-49]
	22,27 --		Darwin and Illusion of Intelligent Design [50-92]
	29 --		Thermodynamics and Origins of Order [93-112]
April	3 --		Thermodynamics and Origins of Order [113-134]
	5-8 --	<u>NO CLASS:</u>	<u>Easter Break</u>
	10,12 --	Shanks:	Science and the Supernatural [135-159]
	17 --		Biochemical Case for Intelligent Design [160-190]
	19 --		Cosmological Case for Intelligent Design [191-223]
	24 --	<u>NO CLASS:</u>	<u>Reading Day</u>
	26 --	Shanks:	Intelligent Designs on Society [224-246]

WEDNESDAY, MAY 2: FINAL EXAM, 12:00-2:30, MK 223

COURSE REQUIREMENTS: All must be completed and on time.

1. A book review (2-4 pages) of one of the more recent books on the conflict between Galileo and the church over his commitment to Copernican astronomy. Be sure to discuss one particular chapter that piqued your interest. Did conflict have to occur in the Galileo affair? Were there historical accidents that might have been avoided? How might the two have interacted more reasonably? Due on January 25, and this counts for 10% of your grade.
2. Summarize one of Polkinghorne's chapters in *Faith, Science & Understanding*. He builds his argument incrementally or cumulatively by mentioning many impressive theologians and philosophers from the Western tradition who have reflected on a symbiotic relation between God and Nature. So, select one of those theories you find interesting and critically analyze it: what strengths do you see in this argument or theory about God and/or Nature? What weaknesses? Can you visualize a way(s) to improve or modify this argument or line of reasoning? Due March 1; this counts for 25% of your grade. This paper should be 3-5 pages in length.
3. There are numerous books available on Darwin's God. Read one recent book on Darwin's attitude towards religion, and give a summary of the book's assessment of Darwin's philosophy of religion. Did the author treat Darwin respectfully as a thinker who genuinely wrestled with the topic of God in relation to scientific knowledge of the natural world? Or did s/he have an agenda to pursue? Please do not use this assignment as an excuse for Darwin-bashing by proof-texting quotations from the biblical text: this assignment asks for an intelligent, fair-minded assessment of one who strove to learn in all areas of study. I will caution you that there are many one-sided sources, from

both neo-Darwinists who want to make him a dogmatic atheist and creationists who use a literalist reading of the Genesis account to dismiss all that Darwin said. So exhibit caution and critical scrutiny in assessing the book you read – you probably should use 2 reviewers (one pro, one con) to support your interpretation of the book. Make it your goal to present a concise annotated bibliographic entry for this book; then at the end of the course, we can compile these into a list for future students to consult. This is worth 20% of your grade and will be due later in the semester; so you can begin working on it over spring break.

4. Shanks analyzes and demolishes most, if not all, of the Intelligent Design movement's arguments for God's guidance in the natural world. Has he critiqued these arguments so thoroughly that no hope survives for a believer who desires rational grounds for his/her belief in God? Or does do you see how to resurrect one of the arguments he dismisses? Or do you find even stronger reasons than Shanks did for defeating the Intelligent Design attempts? Or, are there other non-ID type arguments that have more credibility? This paper should be 4-5 pages long, is due April 26, and will constitute 25% of your grade.
5. The midterm and final exams will count for 20% of your grade. To do well on these, you simply need to review terms, definitions, philosophical principles and positions discussed throughout the course. Use the syllabus as a review sheet to listing those terms and theories, then consult the *Oxford* or *Cambridge Dictionary of Philosophy* or the Stanford Encyclopedia of Philosophy (online), or use EpistemeLinks (also online) for looking up individual philosophers.