

Science, Religion, and Reality

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COURSE DESCRIPTION

Often science and religion are seen as paradigmatically opposed ways of approaching reality. They embody in the popular mind the contrast between knowledge and faith or fact and value. Yet both are considered to be means to understanding the basic nature of reality. What are the relevant differences between belief in electrons and belief in God? Do scientific theories or religious practice commit one to certain beliefs about the nature of reality or the existence of certain entities?

In this course we will first examine the nature of science and what we can reliably come to know about the world through the practice of science. We will then evaluate several approaches to religious knowledge or faith, and ultimately compare science, its practice and the resultant knowledge to religious practice and knowledge.

ASSIGNMENTS

You will write one short paper per week. You will either be in the Tuesday group (and so have a paper due every Tuesday) or the Friday group (and have a paper due every Friday). Every class period, two students will present their papers to the class. In presenting your paper, be prepared to defend the views presented, perhaps altering or refining them in the course of the ensuing discussion. Your grade will be based on thirteen short papers (80%), participation in class discussion (10%) and a final paper (10%). *Whether or not you write a paper, you are required to do the readings and participate in the discussion.*

SHORT PAPERS

A short paper is no longer than 2 page, double-spaced, 12 point font. These papers are meant to develop your ability to write concise and accurate prose. Skip the intro and conclusion, and write only exactly what you mean, and write it only once, in plain language.

I will send out questions for the readings a week in advance. The questions are meant to guide your reading of the text and also provide ideas for what you may want to focus on when writing your short paper.

READINGS

Many readings will be from *Philosophy of Science: The Central Issues* edited by Curd and Cover (C&C on the schedule). I ask that you purchase this book in its first edition. The readings are also in the second edition of the book, but the first is widely available, cheaper, and has all the readings we need.

All other readings in this class will be distributed electronically. *You must print them out and bring them to class.* No laptops or other devices are allowed out in class.

SCHEDULE

Below is a schedule of the core readings. I may supplement these core readings. My primary method of communication with you (apart from in class) will be via email. If there is a significant change to this schedule, I will send out a revision via email.

UNIT 1: SCIENCE

Tuesday 8/30: Opening discussion

Science and Pseudoscience

Friday 9/2

Popper “Science: Conjectures and Refutations” (C&C)

Tuesday 9/6

Lakatos “Science and Pseudoscience” (C&C)

Thagard “Why Astrology is a Pseudoscience” (C&C)

Friday 9/9

Laudan “Science at the Bar: Causes for Concern” (C&C)

Ruse “Pro-Judice” (C&C)

Hasker “Theism and Evolutionary Biology” (pdf)

Realism and Anti-realism in Science

Tuesday 9/13

Mach *The Analysis of Sensations*, Introductory Remarks (1886)

Maxwell “The Ontological Status of Theoretical Entities” (C&C)

Friday 9/16

van Fraassen “Arguments Concerning Scientific Realism” (C&C)

Loudan “A Confutation of Convergent Realism” (C&C)

Tuesday 9/20

Brown “Explaining the Success of Science” (C&C)

Data and Theory

Friday 9/23

Duhem “Physical Theory and Experiment” (C&C)

Tuesday 9/27

Quine “Two Dogmas of Empiricism” (C&C)

Kuhn: Paradigm and Theory Change

Friday 9/30

Kuhn sel. from *Structure of Scientific Revolutions* (C&C, pdf of postscript)

Tuesday 10/4

Kuhn “Objectivity, Value Judgment, and Theory Choice” (C&C)

Friday 10/7

McMullin “Rationality and Paradigm Change in Science” (C&C)

Friday 10/14

Longino “Values and Objectivity” (C&C)

Excursus: Galileo

Tuesday 10/18

Galileo "Letter to the Grand Duchess Christina"
Lindberg "Galileo, the Church, and the Cosmos"
Feyerabend "Galileo and the Tyranny of Truth"

Friday 10/21 (Galileo continued. No new reading.)

Transition

Tuesday 10/25

MacIntyre "Epistemological Crises, Dramatic Narrative, and the Philosophy of Science"

UNIT 2: RELIGION

Arguments

Friday 10/28

Aquinas "Five ways"
Larry Krause Atlantic interview (online)
David Albert Sunday Book Review, "On the Origin of Everything" (online)

Tuesday 11/1

Flew "The presumption of atheism"
Hume "Miracles"

Evidence

Friday 11/4

Swinburne "Evidentialism"
Plantinga "Reformed Epistemology"
Martin "The Verificationist Challenge"

Tuesday 11/8

Plantinga "Naturalism vs. Evolution: A Religion/Science Conflict?"
Nelson "Naturalistic Explanations of Religious Belief"

Pragmatism and Fideism

Friday 11/11

Penelhum "Fideism"
James "The Will to Believe"

Tuesday 11/15

Jordan "Pragmatic Arguments"
Rorty "Religious Faith, Intellectual Responsibility and Romance"

Wittgenstein

Friday 11/18

Whittaker "Wittgensteinian Philosophy of Religion"
Nelson "Wittgensteinian Fideism"

UNIT 3: COMPARISONS

Tuesday 11/22

Conflict

Readings online

Tuesday 11/29

Separate domains: NOMA

Readings online

Friday 12/2

Dialogue

MacIntyre “Moral Pluralism without Moral Relativism”

Tuesday 12/6

Harmony

Perspectives on Harmony of Science and Religion from various religious traditions

Readings online

Friday 12/9

Continued from Tuesday, review.