

BILD87 (Philosophy of Science) The Philosophy of Science and the Science of the Supernatural

(1 unit/2 hrs per week)

Thursday, 1:00 pm-1:50 pm; Room 1129 Muir Biology Building

Description: This seminar class will discuss the basics for the scientific method, and follow some of the most significant discoveries. It will also evaluate the scientific basics for beliefs in supernatural entities. Rationalism and Humanism will be considered in relationship to religious belief systems

Contact information:

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Times available: afternoons and early evenings

Office hours: Immediately following class, by appointment, or

Professor Steve Baird, Department of Medicine UCSD

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Topics to be discussed:

Outline 1:

(1) Introduction and Overview

(2) Rationalism and Humanism

(3) The Creation Story in the Bible and its Sumerian, Babylonian, and Egyptian antecedents. This will introduce myths as a human tradition to explain the unknown.

(4) The Ptolemaic Universe with the Earth at the Center and the Sun, Planets and Stars Revolving around it. Early attempt at a model based on observations.

(5) Aquinas' proof of the existence of God, How to explain the supernatural.

(6) Copernicus and Galileo and the Heliocentric Solar System. The reaction of the Inquisition. Faith vs. Observation and Reason.

(7) Kepler's analysis of the data of Tycho Brahe. The Introduction of the idea of elliptical orbits of planets to explain the data better than Ptolemy did.

(8) Darwin and Evolution. A non-biblical explanation of the origin of species, including humans.

(9) Koch's Postulates for infectious diseases. Microbiology. Microscopes and culture methodology. Disease is due to bugs not devils. Jenner and vaccines to prevent disease.

(10) Mental Illness: possession by demons or cellular malfunction?

(11) Definition of the scientific method and definition of faith. The current state of antiscientific emotion in the faith community and growing atheism in the scientific community.

Outline 2:

(1) The Scientific Method (The Empirical Approach)

(2) The Natural World: From Atoms to the Universe

(3) Darwin, Evolution and The Third Law of Biology

(4) The Psychological Basis for a Belief in the Hereafter

(5) World Mythology: Themes and Variations

(6) The Dark Bible and Its Implications

(7) The Biological Basis for Belief Systems

(8) Richard Dawkins and "The God Delusion"

(9) Science: the record of dead religions (Oscar Wilde)

(10) Rationalism