

HISTORY OF SCIENCE AND RELIGION

Course Number: HPS 326 H

Institution: Victoria University in the University of Toronto

Instructor: Thaddeus Trenn

Course Description:

Science, throughout its history, has been perceived as being intertwined with religion in various ways. Seen historically, rather than locked in a state of conflict or mutual rejection, there are ample signs of a healthy, even symbiotic interaction between these two powerful general forces within the human condition. During this semester we will explore some of the major aspects of this relationship as it has evolved and developed over the centuries, principally from the perspective of Western civilization. Alternative ways of approach will be considered regarding multiple issues in science and religion, issues that continue to perplex our world today. The object and goal of this course is to provide an opportunity to experience a fair and more evenhanded hearing concerning these issues through an examination of carefully selected literature in combination with seminar discussions.

Seminar: Thursday, 2-4 [14:00-16:00]

Location: Vic 206

Instructor: Dr. Thaddeus Trenn: email ttrenn@eagle.ca or fax at 978 3003.

Office hours: 11:00-12:00 Thursday morning or by appointment with the instructor.

Readings:

Students are required to purchase the edited bound *Reprotext* volume R3302 that has been prepared specifically for this course:

History of Science and Religion HPS 326 H

This text is available exclusively from Canadian Scholars' Press, Inc located at 180 Bloor St. W, Suite 1202, Tel 929 2774 or email: info@cspi.org.

Other sources including books, journals and various resources will be suggested throughout the course depending upon student needs and interest.

Course Requirements and Evaluation:

The evaluation scheme is intended:

- to encourage regular participation and involvement throughout the discussions
- to give evidence of depth of understanding of the issues involved
- to minimize the effect of any particular item contributing to the overall final grade.

Ample evidence of *critical* thinking will be encouraged throughout the course. For this reason, the Reprint *History of Science and Religion* HPS 326 H [#R3302] will be considered a basic *vademecum* for papers, essays and the class tests. This procedure is intended to facilitate the overall learning experience, consistent with the goal of achieving and manifesting depth of understanding regarding the issues involved. For papers and essays, students are encouraged to consider drawing also upon additional appropriate source material. Furthermore, students are encouraged to be prepared as **discussion leaders for weekly seminars** and to bring other literature of possible interest to the attention of the class.

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Part I: Historical background

#1.a Science and Its Origins + The Greeks and the Cosmos

David C. Lindberg

[*The Beginnings of Western Science* Ch. 1 & 2] (pp. 1-45)

#1. b Religion and the Rise of Modern Science

Reijer Hooykaas

[*Religion and the Rise of Modern Science*, Intro + var. (pp. xi-7, 12-17, 24-27, 161-162)

#2. Historical Landmarks

Alister E. McGrath

[*Science & Religion: An Introduction*, Ch. 1] (pp. 1- 27)

#3. Science and Theology in the Enlightenment

John Hedley Brooke

[*Religion and Science: History, Method, Dialogue* ed. W. Mark Richardson and Wesley J. Wildman]

#4. The Creationist Tradition and the Emergence of Post-Newtonian Mechanics

Christopher Kaiser

[*Creation and the History of Science* Ch 5]

#5. a The Crime Against Galileo

Karl Giberson

[*Worlds Apart: The Unholy War between Religion & Science* Ch. 6] (pp. 120-137)

#5. b The Parallel between Scientific and Religious Reform

John Hedley Brooke

[*Science and Religion: Some Historical Perspectives* Ch 3]

[first class test at the end of session #5]

Part II: Some Historical Approaches between Science and Religion

#6. Is Religion Opposed to Science?

John F. Haught

[*Science & Religion: From Conflict to Conversation*, Ch. 1]

#7. Ways of Relating Science and Religion

Ian Barbour

[*Religion in an Age of Science* Ch 1]

Part III: Scientists and Religion in History

#8 a. The Power of Modern Agnosticism & The Tragedy of Agnosticism

Bernard Lightman

[*The Origins of Agnosticism: Victorian Unbelief and the Limits of Knowledge*]

#8 b. Science and Mysticism

Sir Arthur Eddington

[*The Nature of the Physical World*, Ch 15 part]

#9 a. Foundations of Mathematical Proof

Alfred North Whitehead and Bertrand Russell

[*Principia Mathematica*]

#9 b. Religion and Science

Alfred North Whitehead

[*Science and the Modern World* Ch. 12]

#9 c. Science and Religion

Bertrand Russell

[*Bertrand Russell on God and Religion*, ed. Al Seckel Ch. 12]

#10. a Theology as a Branch of Physics

Frank J. Tipler

[*The Physics of Immortality: Modern Cosmology, God and Resurrection of the Dead*]

[Introduction + Ch. 13]

#10. b commentaries on Tipler by Mutschler and Raman

#10. c Ultimate Questions

John Polkinghorne

[*Beyond Science: The wider human context* Ch. 7]

Part IV: Some Modern Perspectives on Science and Religion Issues

#11. Modern Scientists' Reflections Upon Issues in Science and Religion

Various Nobel Prize winners and others

[*Cosmos, Bios, Theos* ed. Henry Margenau and Roy A. Vergheese]

[Margenau pp. 57-63] [Mott pp. 64-69] [Penzias pp. 78-83]

[Anfinsen pp. 138-140] [Avber pp. 141-143] [Barton pp. 144-148]

[Eccles pp. 160-164] [Prigogine pp. 188-192]

#12 a. Design, Randomness, and Behe's Black Box

Michael Behe & Denis Lamoureux

[Science and Religion special issue of *The Canadian Catholic Review* vol. 17 no. 3 1999]

#12 b Science, Faith and Design

Thaddeus J. Trenn

[*Journal of Interdisciplinary Studies* vol xi, no. 1 & 2 1999 pp. 175-186]

#13 a. Contrarian Theological Afterword

Timothy Ferris

[*The Whole Shebang: A State-of-the-Universe(s) Report*, Ch. 13]

#13 b. Why Is the World the Way It Is?

Paul Davies

[*The Mind of God: The Scientific Basis for a Rational World* Ch 7]

[second class test at end of session #13]