

HH3032 Science and Religion in History



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Many people have believed that science and religion are contraries. Science is often considered the paradigm of humans' rational thoughts that fight against all kinds of ignorance, bigotry, and superstition, which may include religious thoughts and practices. However, many historians of science after the late twentieth century have found that the relationship between science and religion is far more complex. In some cases, religions do hamper and suppress some scientists' claims and activities, but religions can also be a positive factor in the construction of scientific ideas and worldviews, including those for the rise of modern science. This course aims at your deeper understanding of this complexity in a historical depth.

Assessment:

Midterm Paper (30%)

Final Paper based on Primary Sources (30%)

Quiz (10%)

Pre-Class Questions (10%)

Group Discussion Reports (10%)

Participation and Attendance (10%)

Weekly Readings:

Week 1 Introduction

Peter Harrison, *The Territories of Science and Religion* (Chicago: University of Chicago Press, 2015), pp. 1-19

Mark Noll and David Livingstone, "Introduction," in *The Warfare between Science and Religion: The Idea that Wouldn't Die*, edited by Jeff Hardin, Ronald Numbers, and Ronald Binzley (Baltimore: Johns Hopkins University Press, 2018), pp. 1-5.

Week 2 European Antiquity

David Lindberg, *Beginnings of Western Science* (Chicago: University of Chicago Press, 2008), pp. 21-45.

Harrison, *Territories of Science and Religion*, pp. 21-54.

Week 3 Medieval Islamic World

George Saliba, *Islamic Science and the Making of the European Renaissance* (Cambridge, Mass.: MIT Press, 2007), pp. 1-25.

Lindberg, *Beginnings of Western Science*, pp. 163-192.

A. I. Sabra, "Situating Arabic Science: Locality versus Essence," *Isis* 87 (1996), pp. 654-670.

Week 4 Medieval Europe

Lynn White, Jr., "The Historical Root of Our Ecological Crisis," *Science* 155: 3767 (1967), pp. 1203-7.

Peter Harrison, *Territories of Science and Religion*, pp. 55-81, 136-141.

Edward Grant, *The Foundations of Modern Science in the Middle Ages* (Cambridge: Cambridge University Press), pp. 70-85.

Week 5 Scientific Revolution

Peter Dear, "Miracles, Experiments, and the Ordinary Course of Nature," *Isis* 81 (1990), pp. 663-683.

Frances A. Yates, "The Hermetic Tradition in Renaissance Science," in *Art, Science, and History in the Renaissance*, edited by Charles Singleton (Johns Hopkins University Press, 1968), pp. 255-274.

William Ashworth, Jr., "Christianity and the Mechanical Universe," in *When Science & Christianity Meet*, edited by David Lindberg and Ronald Numbers (Chicago: University of Chicago Press, 2003), pp. 61-84.

Week 6 Trial of Galileo

David Lindberg, "Galileo, the Church, and the Cosmos," in *When Science & Christianity Meet*, pp. 33-60.

Maurice Finocchiaro, "The Galileo Affair," in *The Warfare between Science and Religion*, pp. 27-45.

Mario Biagioli, *Galileo, Courtier: The Practice of Science in the Culture of Absolutism* (Chicago: University of Chicago Press, 1993), pp. 313-352.

Week 7 Darwinism and Religion

Owen Chadwick, *The Victorian Church*, Part II (London: Adam and Charles Black, 1972), pp. 23-35.

Xiaoxing Jin, "The Evolution of Evolutionism in China, 1870–1930," *Isis* 111 (2020), pp. 46-66.

G. Clinton Godart, "'Evolutionary Theory is the Superstition of Modernity': Antievolutionary Thought in Wartime Japan," *Almagest* 12 (2021), pp. 66-91.

Week 8 Scopes Trial

Edward Larson, "The Scopes Trial and the Evolving Concept of Freedom," *Virginia Law Review* 85 (1999), pp. 503-529.

Adam Shapiro, *Trying Biology: The Scopes Trial, Textbooks, and the Antievolution Movement in American Schools* (Chicago: University of Chicago Press, 2013), pp. 62-110.

Week 9 Creation Science in America

Ronald Numbers, *The Creationists: From Scientific Creationism to Intelligent Design* (Cambridge, Mass.: Harvard University Press, 2006), pp. 208-238, 270-279.

James R. Moore, "Interpreting the New Creationism," *Michigan Quarterly Review* 22 (1982), pp. 321-334.

Raymond Eve and Francis Harrold, *The Creationist Movement in Modern America* (Boston: Twayne, 1991), pp. 112-117, 179-182.

Week 10 Creation Science in the World

Hyung Wook Park and Kyuhoon Cho, "Science, State, and Spirituality," *History of Science* 56 (2018), pp. 35-71.

Martin Riexinger, "Turkey," *Creationism in Europe*, edited by Stefaan Blancke, Hans Henrik Hjermitsev, and Peter Kjaergaard (Baltimore: Johns Hopkins University Press, 2014), pp. 180-198.

C. Mackenzie Brown, "Hindu Creationism," *Almagest* 12 (2021), pp. 150-191.

Week 11 Biosciences and Genetically Modified Theology

Conrad Brunk and Harold Coward, *Acceptable Genes: Religious Traditions and Genetically Modified Foods* (Albany: SUNY Press, 2009), pp. 115-133.

Jieun Lee, "Promising Potency: Bio-Evangelical Networking in a Korean Stem Cell Enterprise," *Science as Culture* 29 (2020), pp. 594-616.

Ben Kasstan, "'A Free People, Controlled Only by God': Circulating and Converting Criticism of Vaccination in Jerusalem," *Culture, Medicine, and Psychiatry* 46 (2022), pp. 277-296.

Week 12 Religions and Modern Communication Technologies

Steve Bruce, *Pray TV: Televangelism in America* (New York: Routledge, 1990), chapter 2, 6
Daniel Stout, *Media and Religion: Foundations of an Emerging Field* (New York: Routledge, 2012), chapter 1, 5.

Essay Assignments:

You are expected to write your midterm paper in accordance with questions prepared by me. These questions will be given in 3 weeks ahead of the deadline. You can refer to any sources to answer the questions, but the readings in the syllabus must be cited. The final paper should be written based on your understanding of the primary sources that I give you each week. The topic for the final paper will also be given to you 3 weeks ahead of the deadline. The two papers will be graded based on their relevance, novelty, and ingenuity, as well as your way of citation and referencing. You must follow the Chicago Manual Style in your papers.

Pre-Class Questions:

After finishing the required readings for each week, you must submit a question for discussion during the seminar. The question is to be uploaded in the course portal in NTULearn. These questions will be graded according to their relevance, novelty, and ingenuity.

Discussion Reports:

Based on a few selected pre-class questions, discussion groups must submit their reports to NTULearn and present their conclusions in front of others during the class. All participating members' name must be written in the report, which will be graded according to their comprehensiveness, clarity, and academic depth.

How to Find Readings:

All readings are available in NTULearn's course portal. Most books used in the course will also be found in the NTU libraries.

Primary Source Readings:

There will be at least one piece of short primary sources relevant to each week's topic. I will send the sources before each seminar. You are expected to read the sources before joining the class. These primary sources will be the basis of your final paper.

Plagiarism:

Plagiarism is a serious academic misconduct and may endanger a student's career in a highly severe way. It is done intentionally or unintentionally using another person's ideas and writings without any proper citation and/or quotation marks. Collusion, which may involve a close collaboration in completing an assignment, is another problem. Unless instructed otherwise, your midterm assignment should be done by yourself alone. Paraphrasing is an act of rewriting other people's ideas or arguments using your own words. While this is an acceptable practice in most cases, it can be an issue if you do not indicate that the ideas have come from another person's works. If you are not sure about how you should do regarding these issues, please do cite the referred sources in footnotes/endnotes and use the quotation marks around the terms you did not originally write. Even if you cited the source, your paper can be a problem without the proper use of quotation marks. If any plagiarized sentence or paragraph is detected, the grade will be reduced to zero.

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