

“Historical Encounters of Science and Religion”

HISC 110

Spring Quarter, 2018

Professor Robert S. Westman

Tu Th 11–12:20 p.m.

Solís Hall 111

Office: H&SS 4072; Office Hours: Thursdays, 2:15–4:15 p.m. Sometimes at Perk's Café (TBA); & also by appointment.

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This course is a historical examination of the encounter between religion and science. The class asks whether science and religion are inherently at odds or “at war” with one another, as some nineteenth-century historians and twentieth- and twenty-first century journalists liked to say. Is there a single defining relationship between science and religion, such as Galileo’s dramatic engagement with the Catholic Church in the early seventeenth century or the 1925 “Monkey Trial” of John Scopes in Dayton, Tennessee? Focusing on these examples, among others, this class shows that these questions—as well as the answers given to them—have their own history.

Schedule of Lecture Topics and Associated Readings

April 3. "Science-and-Religion": The Warfare Thesis

John W. Draper, *History of the Conflict between Religion and Science* (1874), Preface + chap. xii.

<http://www.gutenberg.org/files/1185/1185-h/1185-h.htm>

Thomas Dixon, *Science and Religion*, pp. 1–17.

April 5. The Church and the Earliest Universities.

European Universities, 1088–1783.

Helen Wieruszowski. *The Medieval University*. Excerpts on TritonEd.

http://en.wikipedia.org/wiki/List_of_early_modern_universities_in_Europe#16th_century

David Lindberg, "Medieval Universities." Excerpt on TritonEd.

Stephen C. Ferruolo, "*Parisius–Paradisus: The City, Its Schools, and the Origins of the University of Paris*," pp. 22–43. On TritonEd.

April 10. Aristotle's Physics and the Liberal Arts Curriculum

http://en.wikipedia.org/wiki/Aristotelian_physics [Only up to the section headed: "Life and Death of Aristotelian Physics"]

Thomas Kuhn, Excerpt from *The Copernican Revolution*

April 12. Natural Philosophy and Theology in the Medieval University

Edward Grant, "Science and Theology in the Middle Ages," in *God and Nature*, pp. 49–75. On TritonEd.

April 17. Copernicus's Innovation.

Robert Westman, "The Copernicans and the Churches," in *God and Nature*, pp. 76–81 (only). On TritonEd.

Dennis Duke: Planetary Animations:

<http://people.sc.fsu.edu/~dduke/models.htm>

Check animations for: "Ptolemy's Cosmology"; "Kepler's Cosmology"; "Kepler Motion"; "Transformation between a geocentric model and a heliocentric model for an outer planet (Jupiter/Mars) and an inner planet (Venus)"

April 19. Protestant and Catholic Reactions to Copernicus's Heliocentric Hypothesis.

Robert Westman, "The Copernicans and the Churches," in *God and Nature*, pp. 81–98. On TritonEd.

Richard Blackwell, *Galileo, Bellarmine and the Church*, pp. 5–27.

Read primary source text in Blackwell:

"Decrees of the Council of Trent, Session IV (8 April 1546)," pp. 181–184.

April 24. Galileo's Telescope: Observing and Representing.

Galileo Galilei. *Sidereus Nuncius*. 1610. Original copy: Linda Hall Library, Kansas City, Missouri:

<http://www.chlt.org/sandbox/lhl/GalileoSkel1610/page.0.a.php?size=240x320>

Albert Van Helden. "A Brief History of Galileo's Telescope":

<http://cnx.org/content/m11932/latest/>

April 26. Church Standards for Interpreting the Meaning of the Bible.

Richard Blackwell, pp. 29–51. Primary texts in Blackwell:

Diego de Zuñiga, *Commentary on Job 9:6* (1584), pp. 185–186.

Robert Bellarmine, *On Controversies about God's Word* (1586), pp. 187–194.

May 1. Galileo's Approach to the Interpretation of the Bible.

Richard Blackwell, pp. 53–85.

Galileo's *Letter to Castelli* (21 December 1613) in Blackwell, pp. 195–201.

The Galileo–Dini Correspondence (February–March, 1615) in Blackwell, pp. 203–216.

May 3. Paolo Antonio Foscarini: An Unexpected Ally of Galileo's in the Church.

Richard Blackwell, pp. 87–110.

Foscarini's *Letter Concerning the Opinion of the Pythagoreans and Copernicus About the Mobility of the Earth and the Stability of the Sun and the New Pythagorean System of the World* (1615), pp. 217–251.

May 8. MID-TERM EXAM

May 10. Galileo, the Theologians and the Trial.

Richard Blackwell, pp. 111–134.

"An Unidentified Theologian's Censure of Foscarini's *Letter*," pp. 253–254.

"Foscarini's *Defense* of His Letter," pp. 255–263.

"Bellarmine's *Letter to Foscarini*," pp. 265–267.

"Galileo's Unpublished Notes (1615)," pp. 269–276.

May 15. The Historical and Philosophical Meaning of the Galileo Affair.

Richard Blackwell, pp. 165–186.

Thomas Dixon, *Science and Religion*, pp. 18–36.

May 17. Natural Theology and Design.

William Paley. The Watchmaker Argument, chaps. 1–3.

<http://homepages.wmich.edu/~mcgrew/PaleyWatch.pdf>

"Jefferson Bible" (Wikipedia)

http://en.wikipedia.org/wiki/Jefferson_Bible

Gary Deason, "Reformation Theology and the Mechanistic Conception of Nature," in *God and Nature*, pp. 167–191.

May 22. **SHORT PAPER DUE. Darwin and Responses to Evolution.**

Frederick Gregory, "The Impact of Darwinian Evolution on Protestant Theology in the Nineteenth Century," in *God and Nature*, pp. 369–390.

Thomas Dixon, *Science and Religion*, pp. 58–80. On TritonEd.

Archbishop James Ussher's chronology of the history of the world:

http://en.wikipedia.org/wiki/Ussher_chronology

Biography of James Ussher:

http://en.wikipedia.org/wiki/James_Ussher

May 24. **Fundamentalism and Creationism.**

Ronald L. Numbers, "The Creationists," in *God and Nature*, pp. 391–423. On TritonEd.

Thomas Dixon, *Science and Religion*, pp. 81–93.

Edward Larson, *Summer for the Gods*, pp. 11–59.

May 29. **The Scopes Trial.**

Edward Larson. *Summer for the Gods*, pp. 60–169.

FILM: *Inherit the Wind* (1960). TBA

May 31. **The Scopes Trial Dramatized.**

Edward Larson, *Summer for the Gods*, pp. 170–278.

June 5, 7. **The Cold War and the DeChristianization of the University.**

Thomas Dixon, *Science and Religion*, pp. 93–126.

Edward Larson, *Summer for the Gods*, pp. 267–278.

American Association for the Advancement of Science (AAAS) "Statement on the Teaching of Evolution" (February 16, 2006):

<http://www.project2061.org/publications/2061Connections/2006/2006-01c.htm>

President Dwight D. Eisenhower's Farewell Address to the Nation, January 17, 1961 https://www.youtube.com/watch?v=CWiIYW_fBfY

California Master Plan for Higher Education.

<http://www.ucop.edu/acadinit/mastplan/mpsummary.htm>

David Hollinger, *Science, Jews and Secular Culture: Studies in Mid-Twentieth Century American Intellectual History* (Princeton: Princeton UP, 1996), pp. 3–16. TritonEd

Required Readings (For purchase)

Richard J. Blackwell. *Galileo, Bellarmine, and the Bible*. University of Notre Dame Press, 1991.

Thomas Dixon. *Science and Religion. A Very Short Introduction*. Oxford University Press, 2008.

Edward J. Larson. *Summer of the Gods: The Scopes Trial and America's Continuing Debate Over Science and Religion*. New York: Perseus, 2006. First edition, 1997.

All other required readings are posted to TritonEd.

Powerpoint. IMPORTANT

All powerpoint from 2017 are currently posted. HOWEVER, please note that I often make changes and adjustments to previous lectures. Therefore, the most up-to-date version will correspond to the actual date on which the lecture is actually delivered.

The powerpoint should be considered to be an aid to your understanding of the material. BUT, to get the most advantage from the powerpoint--you need to attend the lectures. Much of what I will have to say in class is NOT on the powerpoint slides themselves.

Assignments

1. Mid-Term Exam: Tuesday, May 8, in-class
 2. Short Paper. Due in class, Tuesday, May 22.
6 double-spaced pages. Please use 12 pt. font: Lucida Sans Unicode.
 3. Final Examination: Tuesday, June 12, 11:30 a.m.
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Breakdown of Grading:

Mid-Term: Multiple Choice/Short Answer: 25%

Short Paper: 25%

Final Exam (essay): 50%

Final grade will be the average of the multiple choice/short answer exam + short paper + final exam; final grade adjusted +/- by assessment of quality of class participation.

CLASS ETIQUETTE:

Please put away cell phones and laptops during lecture.

Please notify instructor beforehand if you must leave early.

Only assigned readings to be used for exams and papers.

ACADEMIC INTEGRITY

- UCSD has a university-wide Policy on Integrity of Scholarship, published annually in the General Catalog, and online at <http://students.ucsd.edu/academics/academic-integrity/policy.html>. All students must read and be familiar with this Policy. All suspected violations of academic integrity will be reported to UCSD's Academic Integrity Coordinator. Students found to have violated UCSD's
- standards for academic integrity may receive both administrative and academic sanctions. Administrative sanctions may extend up to and include suspension or dismissal, and
- academic sanctions may include failure of the assignment or failure of the course. Specific examples of prohibited violations of academic integrity include, but are not limited to, the following:

- Academic stealing refers to the theft of exams or exam answers, of papers or take-home exams composed by others, and of research notes, computer files, or data collected by others.
- Academic cheating, collusion, and fraud refer to having others do your schoolwork or allowing them to present your work as their own; using unauthorized materials during exams; inventing data or bibliography to support a paper, project, or exam; purchasing tests, answers, or papers from any source whatsoever; submitting (nearly) identical papers to two classes.
- Misrepresenting personal or family emergencies or health problems in order to extend deadlines and alter due dates or requirements is another form of academic fraud. Claiming you have been ill when you were not, claiming that a family member has been ill or has died when that is untrue are some examples of unacceptable ways of trying to gain more time than your fellow students have been allowed in which to complete assigned work.
- Plagiarism refers to the use of another's work without full acknowledgment, whether by suppressing the reference, neglecting to identify direct quotations, paraphrasing closely or at length without citing sources, spuriously identifying quotations or data, or cutting and pasting the work of several (usually unidentified) authors into a single undifferentiated whole.
- **Receipt of this syllabus constitutes an acknowledgment that you are responsible for understanding and acting in accordance with UCSD guidelines on academic integrity.**