

History of Science / Medicine 331: Science, Medicine, and Religion

Fall 2005

Instructor: Stephen Wald (sewald@wisc.edu)

Meeting Place: 6112 Social Science, 1180 Observatory Drive

Meeting Time: Tues. / Thurs. 6:30-7:45 p.m.

Office Hours: Thursdays, 5-6 p.m. in 5785 MSC, or by appointment

Course Goals: To grow as citizen-scholars by . . .

- cultivating habits of historical thinking in science-religion issues while cutting your historical teeth on some of the best scholarship in the field (readings and class participation)
- nurturing your own curiosity about science and religion in American history while developing and refining skills of research and communication necessary to answer them (readings and research paper)
- helping you to achieve whatever other goals you might bring to this course

Requirements and Grading:

A= 90-100+ points
B = 80-89 points
C = 72-79 points
: (= 71 points or less

60+ points -- Research Paper and supporting materials: Papers will range from 2,000 to a maximum of 2,500 words as determined by word processor (approx. 8 to 10 double-spaced pages). Each word over 2,500 on the final-best effort will cost a point. Especially thoughtful and lively journals can earn you up to **eight bonus points**. Overdue submissions will be docked five points per day. All will be further explained in assignment handouts. Here, however, are the deadlines:

Sept. 29 -- Phase I, question / problem statements (not graded)

Oct. 18 -- Phase II, prospectus (not graded)

Nov. 22 -- Phase III, first-best effort (preliminary grade)

Dec. 23 -- Phase IV, final-best effort (for final grade)

20 points -- Exam(s), your choice:

- 1) One exam (20 pts): a final 10-minute oral exam (instructor-recommended option)
- 2) One exam (20 pts): a final 2-hour in-class written (if you get easily tongue-tied)
- 3) Two exams (10 pts ea.): a take-home mid-term plus a final exam per formats 1 or 2 (if you love extra work as much as I do)

10+ points -- Pop-quizzes: Over the course of the semester, I will inflict seven unannounced quizzes, each worth two points, all or nothing. Five will count. Questions will be ridiculously easy for those who have attended to assigned readings; next to impossible for those who haven't. The two extra quizzes are each worth **one bonus point**.

10 points -- Attendance: Everyone starts out with a full account. You are granted one unexplained, unexcused absence without penalty. (Pop quizzes given during such an absence, however, cannot be made up.) Every such absence thereafter will result in the deduction of 5 points. Planned and well-excused absences (ones discussed with me ahead of time) cost 2 points each or can be made up to avoid penalty.

Remember, I want you to succeed! As Jerry McGuire said: "*Help me . . . help you!*" If you need help or advice with any aspect of the course, **PLEASE ASK**.

Required Books: (Available on reserve at College Library or for purchase at UBS)

Larson, Edward J. *Trial and Error: The American Controversy over Creation and Evolution*. 3rd ed. Oxford ; NY: Oxford University Press, 2003.

Lindberg, David C., and Ronald L. Numbers. *When Science & Christianity Meet*. Chicago: University of Chicago Press, 2003.

Numbers, Ronald L. *Darwinism Comes to America*. Cambridge, Mass.: Harvard University Press, 1998.

Ruse, Michael. *But Is It Science? : The Philosophical Question in the Creation/Evolution Controversy, Frontiers of Philosophy*. Buffalo, NY: Prometheus Books, 1988.

Course Calendar (Readings to be completed by dates listed)

Week 1 **Martial Metaphors in Science and Religion**

Sept. 6 Introductions

Sept. 8 Visiting Lecturer: Prof. David C. Lindberg on the Galileo Affair

White (1869). "The Battle-Fields of Science." (Reader: 3-5)

Numbers & Lindberg (1986). "Beyond War and Peace: A Reappraisal of the Encounter between Christianity and Science." (Reader: 7-15)

Week 2 **Darwinism and Nineteenth-Century Protestant Intellectuals**

Sept. 13 Numbers (1998). "Darwinism and the Dogma of Separate Creations: The Responses of American Naturalists to Evolution." In *Darwinism Comes to America*, pp. 24-48.

** *Craft of Research*, § 3.0-3.2 (Reader Appendix, 459-461)

Sept. 15 Roberts (1988). "'Canst Thou by Searching Find out God?': The Protestant Evolutionists' Defense of Theism." (Reader: 17-38)

** *Craft of Research*, § 3.3-3.4, and "Quick Tip: Finding Topics" (Reader Appendix, 461-466)

Week 3 **Evolving Views of the Bible**

Sept. 20 Szasz (1982). "The Rise and Spread of Higher Criticism." Reader: 39-56.

Marsden (1980). "Presbyterians and the Truth." (Reader: 57-68)

** *Craft of Research*, § 4.0-4.2 (Reader Appendix, 467-472)

Sept. 22 Visiting Lecturer: Adam Shapiro, Univ. of Chicago, on Biblical Literalism and Inerrancy

Numbers (2000). "'The Most Important Biblical Discovery of Our Time': William Henry Green and the Demise of Ussher's Chronology." (Reader: 69-79)

Livingstone & Noll (2000). "B. B. Warfield (1851-1921): A Biblical Inerrantist as Evolutionist." (Reader: 81-102)

Numbers (1992). "George Frederick Wright: From Christian Darwinist to Fundamentalist." (Reader: 103-114)

** *Craft of Research*, § 4.3-4.4, and "Quick Tip: Disagreeing with Your Sources" (Reader Appendix, 473-476)

- Week 4** **Gilded-Age Doubt**
- Sept. 27 Carter (1971). "The Confrontation of Doubt and Faith."
(Reader: 115-128)
- Moore (1989). "Of Love and Death: Why Darwin 'Gave up Christianity.'"
(Reader: 129-146)
- Sept. 29 **RESEARCH PAPER PHASE I DUE: QUESTION / PROBLEM
STATEMENTS**
Conferences / workshop
- Week 5** **Anti-Evolutionism and Modern Creationism**
- Oct. 4 Film: "Inherit the Wind" (1960)
- Larson, Edward J. "The Scopes Trial in History and Legend." In Lindberg & Numbers
(eds.), *When Science & Christianity Meet*, pp. 245-64.
- ** Skinner, "How to Discover What you Have to Say"
(Reader Appendix, 477-84)
- Oct. 6 Visiting Lecturer: Prof. Ronald Numbers on young-earth creationism
- Numbers, Ronald L. "Creating Creationism: Meanings and Uses since the Age of
Agassiz." In *Darwinism Comes to America*, pp. 49-57, 179-82.
- Numbers, Ronald L. "The Creationists." In Ruse (ed.), *But Is It Science?: The
Philosophical Question in the Creation/Evolution Controversy*, pp. 227-56.
- Week 6** **Responses to Darwinism -- Race, Region, and Religion**
- Oct. 11 Appleby (1999). "Exposing Darwin's 'Hidden Agenda': Roman Catholic Responses to
Evolution, 1875-1925." (Reader: 147-164)
- Swelitz (1999). "American Jewish Responses to Darwin and Evolutionary Theory,
1860-1890." (Reader: 165-183)
- Oct 13 Moran (2004). "The Scopes Trial and Southern Fundamentalism in Black and White:
Race, Region, and Religion." (Reader 185-198)
- Week 7** **The Battle for the Public-School Curriculum**
- Oct. 18 **RESEARCH PAPER PHASE II DUE: PROSPECTUS**
Conferences / workshop
- Oct. 20 Larson, Edward J. *Trial and Error: The American Controversy over Creation and
Evolution*. 3rd ed., pp. 125-213.
- Week 8** **"Demarcation" and "Boundary Work"**
- Oct. 25 Ruse, Michael. *But Is It Science?*, pp. 13-35; 335-366.
- Oct. 27 Gieryn (1983). "Boundary-Work and the Demarcation of Science from Non-Science:
Strains and Interests in Professional Ideologies of Scientists." (Reader: 199-213)

Week 9**Science and Secularization**

- Nov. 1 Berger (2002). "Secularization and De-Secularization." (Reader: 215-222)
Hollinger (1997). "Jewish Intellectuals and the De-Christianization of American Public Culture in the Twentieth Century." (Reader: 223-234)
Hollinger (2001). "The 'Secularization' Question and the United States in the Twentieth Century." (Reader: 235-240)
Sommerville (2002). "Post-Secularism Marginalizes the University: A Rejoinder to Hollinger." (Reader: 241-245)
Hollinger (2002). "Why Is There So Much Christianity in the United States? A Reply to Sommerville." (Reader: 247-250)
- Nov. 3 **** No Class**

Week 10**Naturalism and Supernaturalism**

- Nov. 8 Numbers, Ronald L. "Science without God: Natural Laws and Christian Beliefs." In Lindberg & Numbers (eds.), *When Science & Christianity Meet*, pp. 265-85.
Mullin, Robert Bruce. "Science, Miracles, and the Prayer-Gauge Debate." In Lindberg & Numbers (eds.), *When Science & Christianity Meet*, pp. 203-24.

Week 10 / 11**Miracles and Healing**

- Nov. 10 Harrell (1988). "Divine Healing in Modern American Protestantism." (Reader: 251-57)
Mullin (1996). "Catholics and the Question of Miracles." (Reader: 259-68)
- Nov. 15 Schoepflin (1988). "Christian Science Healing in America." (Reader: 269-80)
Fuller (2001). "Alternative Medicines, Alternative Worldviews." (E-Reserves--access under "Academics tab" in My UW)

Week 11 / 12**Psychology and Religion**

- Nov. 17 Burnham (1985). "The Encounter of Christian Theology with Deterministic Psychology and Psychoanalysis." (Reader: 281-97)
Roberts, Jon H. "Psychoanalysis and American Christianity, 1900-1945." In Lindberg & Numbers (eds.), *When Science & Christianity Meet*, pp. 225-44.
- Nov. 22 Heinze (2001). "Jews and American Popular Psychology: Reconsidering the Protestant Paradigm of Popular Thought." (Reader: 299-313)
Coon (1992). "Testing the Limits of Sense and Science: American Experimental Psychologists Combat Spiritualism, 1880-1920." (Reader: 315-23)

RESEARCH PAPER PHASE III DUE: FIRST-BEST EFFORT

- Nov. 24 **** No Class -- Thanksgiving Break**

Week 13**Biotechnology and Religion**

- Nov. 29 Zenderland (1998). "Biblical Biology: American Protestant Social Reformers and the Early Eugenics Movement." (Reader: 325-332)
- Dec. 1 Evans (2002). "Setting the Stage: The Eugenicists and the Challenge from the Theologians." (Reader: 333-53)

Week 14 **Sciences of the Soul**

- Dec. 6 Film: "Timothy Leary's Dead" (1996)
Lee & Shlain (1992). "Under the Mushroom, Over the Rainbow." (Reader: 355-70)
Leary & Alpert (1962). "Foreword." (Reader: 371-74)
- Dec. 8 LeConte (1885). "Immortality in Modern Thought." (Reader: 375-76)
Sperry (1988). "Psychology's Mentalist Paradigm and the Religion/Science Tension"
[and letters, 1990]. (Reader: 377-87)

Week 15 **Religions of Science**

- Dec. 13 Gilbert (1997). "The Religion of Science." (Reader: 389-403)
- Dec. 15 Taylor (1999). *Shadow Culture: Psychology and Spirituality in America*.
(Reader: 405-36)
Easterbrook (2002). "The New Convergence." (Reader: 438-41)
Bronson (2002). "A Prayer Before Dying." (Reader: 443-49)
Larson & Witham (1999). "Scientists and Religion in America."
(Reader: 451-55)

Exams and Final Paper

- Dec. 17** **(Sat.) 7:25 - 9:25 p.m.:** Final 2-hr. written exam.
- Dec. 19-20** **(Mon., Tues.) 9:00 a.m. - 12 p.m. (by appointment):** Final 10-min. oral
examinations
- Dec. 23** **(Friday) 12 p.m. sharp:**
FINAL RESEARCH PAPER AND SUPPORTING MATERIALS DUE
Deposit in cardboard box outside of room 5785 MSC.