

History of Science 555
Spring, 2007
Course Syllabus

3:30-5:25 Tuesdays, 4308 Social Science

Instructor: Blair Nelson

Office Hours: 1:00-2:00 p.m. Tuesdays

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Personal note: I live in Baraboo and usually will be on campus Tuesdays only. Feel free to call me at home, but please keep all calls between 9 a.m. and 9 p.m. Also, please remember to identify yourself when you call, ie. name and that you are a HoS 555 student. My wife or one of my children may answer. Of course, email is always available to you. I check at least daily, often more. Some of your assignments will be submitted by email.

Description:

As the capstone course for the History of Science major, History of Science 555 introduces you to the “doing” of history, as opposed to merely studying other historians’ work. Some of you may have written papers based on primary sources, but likely most of your work has been historiographic in nature. Your primary task in this course will be to research and write a 15 – 25 page paper involving the interpretation of primary sources in interaction with secondary sources. In other words, you are going to write history! All the reading and assignments will contribute to that task. In class you will learn the steps involved in writing an original research paper using primary sources. These steps include selecting a topic, finding and interpreting sources, constructing an argument, and writing and revising the paper.

Class Room Expectations:

Doing history is a combination of lonely individualism and communal activity. Research and writing are solitary activities, but the results, both in development and the final product, are shared with a community, which in turn provides critical assessment. No historian in her or his right mind publishes anything without having a few colleagues read it first. Academic publishers and journals use a peer review process. Thus, any academic work of history always bears the community’s mark, even if only one name stands on the title page. You will do much of your work for this course alone in the library and in front of the computer. Our classroom time will provide the communal input. Both class discussion and review by peers and the instructor will add depth and meaning to your work. It is imperative, of course, that you come prepared, give your own input, and be receptive to other’s comments.

This is not a light course. It demands lots of time and effort. Our class sessions are the place to find information, guidance, insight, and inspiration. This is not an

instructor-centered class. Students will contribute answers as well as questions. Therefore, everyone, instructor and students, have the right to expect a lot from you, as you do from them. The better prepared you are for class the better the class sessions will serve your interests and your research. Remember, this is a research seminar in which we, as a group, will research aspects of a common topic, helping each other through the process. Each student will select their own research topic, but each will fall under the general rubric of the following:

General Topic:

“Science v. Religion in the Public Eye:

From Wilberforce v. Huxley to the State of Tennessee v. Scopes.”

If you have been exposed to “science and religion” issues as any point, you have been assured that the notion of perpetual conflict between the two is a historical fallacy. Yet, it remains a powerful public perception. A number of historical events have reinforced the notion of such metaphysical combat. The two “cases” in the title above [only one was an actual court case] took place a few decades apart and endure in the collective imagination. These were public events that became tools in a cultural contest that is not yet resolved. You are to choose some aspect of the public debate over the relationship between religion and science, in the period between these two events, for your research topic. Pay close attention to the readings and class discussion, and your paper will surely benefit.

Requirements:

Make this course a priority. It will test you.

- The central requirement is a major research paper, approximately twenty pages long, based mainly on primary sources. The paper is due week 12, **April 17th**! It will be graded by the instructor and reviewed by a peer. Based on this feedback, and your own continued efforts, you will then revise it. The final version is due **May 16th**. Each version of the paper will be graded separately.

- The second requirement is a formal talk summarizing the results of your paper. This talk will be about 12 minutes long, with 3 minutes for questions. The talks will be scheduled for the last three weeks of the course.

- Expect smaller weekly assignments designed to guide you through the research and writing process, teaching you the advanced skills needed for the research paper.

- Class discussion is expected and will contribute to your grade. Remember that much of what you learn will come from your classmates.

- Proper scholarly apparatus is required for your paper, ie. footnotes and bibliography. You are required to use the Chicago/Turabian citation style. You can find the basics at <http://www.wisc.edu/writing/Handbook/DocChicago.html>. For further

detail consult Kate L. Turabian, *A Manual for Writers of Term Papers, Theses, and Dissertations*.

Getting help:

Some are natural writers, some are not. All of us need help at times. Your instructor will supply all the help he can. Also, the UW Writing Center is an excellent resource. They can help you with grammar and style, organization and argument, clarity and persuasiveness. Even Ph.D. students go there! See, <http://www.wsic.edu/writing> for more information. Also, all UW libraries are staffed with excellent librarians. Use them!

Please, do not wait to ask for help if you need it. This course is too intense to let problems compound.

Grades:

The relative weights of the assignments will roughly be:

50% for the papers

40% for the weekly assignments

10% class discussion and presentations.

The instructor reserves the right to adjust this to insure fairness. With each student choosing a different topic, some being more difficult than others, adjustments may need to be made to manufacture a "level playing field."

Course books and readings:

There are no required books. The class reader is available in the HoS department office. Hours are:

This week, 1/22 - 1/26: 8 am to 6 pm

Next week through Thursday, 1/29-2/1: 8 am to 5 pm

Thereafter: 8 am to 3 pm

Cost: \$13.00

Class Schedule

Week 1 (1/23) – Introduction to Historical Research

Introduction to the seminar, discussion of the nature of historical research and writing, and the course topic.

Week 2 (1/30) – From Sources to Narrative

Discussion of the reading assignment and the relationship between Numbers' sources and his text. Research method: how to find primary sources.

Readings: - Ronald L. Numbers, *The Creationists: The Evolution of Scientific Creationism* (New York: Knopf, 1992), pp. 3-19 and 351-355, (ch. 1 and endnotes).

Assignment: 1) Prepare for discussion on the reading. 2) Locate two of the sources from the endnotes of the *Creationists* chapter, read them carefully, and write one or two, double-spaced pages on their relationship to Number's text.

Week 3 (2/06) Conflict in the Public Eye: Secondary Sources

Discussion of this week's readings, including the "conflict thesis," and Wilberforce v. Huxley. Discussion of how to find secondary sources.

Readings: Secondary - David C. Lindberg and Ronald L. Numbers, eds. *God and Nature: Historical Essays on the Encounter between Christianity and Science* (Berkeley: University of California Press, 1986), pp. 1-18 ("Introduction")

Primary - J. Vernon Jensen, "Return to the Wilberforce—Huxley Debate," *BJHS* 21 (1988): 161-179.
- John Tyndall, "Belfast Address," in *Fragments of Science* (New York, 1898), selections.

Assignment: 1) Prepare for discussion on the reading. 2) Find three primary sources on a topic related to this course. Locate these sources and write a brief description of their content, no more than one double-spaced page. List the sources on a separate page using Turabian bibliography format.

Week 4 (2/13) More Conflict in the Public Eye: Primary Sources

Discussion of this week's readings, especially the Scopes trial and religious views of evolution. Research: How to find a topic.

Reading: Secondary - Edward Larson, "The Scopes Trial in History and Legend," in *When Science and Christianity Meet*, edited by David C. Lindberg and Ronald L. Numbers (Chicago: University of Chicago Press, 2003), pp. 245-264, 317-319.

Primary - Benjamin B. Warfield, "On the Antiquity and the Unity of the Human Race," *The Princeton Theological Review* 9 (1911):1-25.
- J. C. Cahoun Newton, "The Turning Tide of Evolution," *The Methodist Quarterly Review* 75 (1926): 440-452.

Assignment: 1) Prepare for discussion on the reading. 2) Find a cluster of at least three secondary sources, including at least one journal article and at least one book or book chapter. In no more than one double-spaced page, describe what unites these sources and explain how you located them.

Week 5 (2/20) Thinking Like a Historian

Discussion of what historians do and why.

Reading: Richard Marius, *A Short Guide to Writing about History*, 3rd ed. (New York: Addison-Wesley-Longman, 1999) 1-12, 29-48 (introduction, ch. 2).

Assignment: Write up preliminary research topic ideas. Obtain at least five new sources; be sure to add both primary and secondary sources. Include an annotated bibliography describing the content of each source in one or two sentences.

Week 6 (2/27) Letting the Research Question Drive Your Research

Focusing your topic and defining problems that will drive your research.

Reading: Wayne C. Booth, Gregory G. Colomb, and Joseph M. Williams, *The Craft of Research* (Chicago: University of Chicago Press, 1995), 35-84.

Assignment: Prepare for discussion of the readings. Plunge back into research to find and read more sources. Be sure you have identified the best tools for finding primary sources for your topic. Now is a good time to talk with a reference librarian, particularly the reference librarians at specialized libraries for your topic (ie., State Historical Society for all things American, Ebling for medical topics.)

Write a short paragraph discussing your revised topic; also discuss the strategies and bibliographic tools you are using for your research. Include an updated annotated bibliography. I'll be concerned if you have less than 10 good sources at this point; you should also have a mix of primary and secondary sources (heavier on the primary), including both books and articles.

Week 7 (3/06) Constructing Your Argument

Modes of historical writing; how to formulate a good argument.

Reading: Marius, *A Short Guide to Writing About History*, 3rd ed., 49-71 (ch. 3).

Assignment: After reading Marius, write up a summary of your argument, clearly stating the proposition you hope to prove, the type of evidence you will use to support it, and the reason the reader should care (the answer to the “so what” question). Email the assignment to me by **6:00 pm Monday**.

Week 8 (3/13) Structuring Your Paper to Support Your Argument

How to organize a research paper.

Reading: Jacques Barzun and Henry F. Graff, “Organizing: Paragraph, Chapter, and Part,” ch. 9 in *The Modern Researcher*, 5th ed. (Fort Worth, TX: Harcourt, Brace, and Jovanovich, 1992), 201-23.

Assignment: **By 6:00 pm Monday**, email me a provisional outline of your paper, stating the argument and describing the main sections you will use to develop the argument.

Week 9 (3/20) Writing with Style: Tricks of the Historian’s Trade

How to communicate your argument effectively. Sign up for individual meeting next week.

Reading: Joseph M. Williams, *Style: Ten Lessons in Clarity and Grace*, 3rd ed. (New York: HarperCollins, 1989), 1-63 (skip the exercises).

Assignment: Write one self-contained, temporally ordered story on some aspect of your research, drawing mainly on primary sources. Do not exceed four double-spaced pages. Pay careful attention to what Williams terms the grammar of clarity and cohesion. Include footnotes.

Week 10 (3/27) Individual Meetings; No Class

With papers due soon, this is a crucial time to make sure that you have a solid argument and a good structure for your paper.

Assignment: by **6 pm Monday evening**, email me your revised outline and list of sources.

Spring Break: Mar 31-Apr 8

You should have plenty to keep you busy during break. But have some fun, too!

Week 11 (4/10) Mechanics of the Research Paper

Technical details of the research papers, including use of quotations, footnotes and bibliography. Bring specific questions to class related to your papers.

Reading: <http://www.wisc.edu/writing/Handbook/DocChicago.html>. Review the material in the pages linked by the first bullet points.

Assignment: Practice producing correct footnotes for a section of your draft, at least five pages. Bring the draft with footnotes to class for peer editing.

Week 12 (4/17) PAPERS DUE: Strategies for Revision and

Strategies for revision and expectations for peer review.

Assignment: Hand in your completed, polished paper. Bring a second copy to exchange with a classmate. Remember this version is not a draft, but rather a finished paper, and it will receive its own grade.

Week 13 (4/24) Discussion of Revisions How to Give an Oral Presentation

You will share your peer-review comments with your classmate, and we will discuss how to do oral presentations.

Assignment: Carefully read and comment on your classmate's paper following the instructions in the handout; remember to bring in two copies of your comments, one for me and one for the author.

Weeks 14 & 15 (5/01 & 5/08) Final Presentations

Participants will present formal summaries of their research results and respond to questions.

Assignment:

- 1) Present a polished, 12-minute summary of your research paper.
- 2) Those not presenting a particular week should keep working on their revisions.

FINAL PAPER DUE May 16th.

