

History 108
Science and Technology in World History

BULLETIN INFORMATION

HIST 108 – Science and Technology in World History (3 credit hours)

Course Description:

A general survey of developments of science and technology in world civilizations from antiquity to the present, emphasizing the ways in which social and personal values and ethics were shaped—and were shaped by—those developments.

SAMPLE COURSE OVERVIEW

The study of history at the college level is quite different from studying history in high school. Instead of only learning names, dates, and events in a timeline (although you do need to know content!), college students study and analyze different types of source materials to interpret the past. Events can be seen from multiple perspectives. In the history of science this requires that past ways of understanding nature be taken seriously as functional knowledge that supported societies, rather than as simply wrong or interpretations we no longer believe. Successful students learn to construct arguments and defend them by marshaling a variety of supporting evidence. Studying history develops critical thinking skills and creates informed citizens.

In college, the burden of learning is placed on the student. I am willing to give my students as much time and attention as they want. It is the student's responsibility to be engaged with the material.

ITEMIZED LEARNING OUTCOMES

Upon successful completion of History 108, students will be able to:

1. Demonstrate knowledge of the principles of historical thinking to understand human societies, specifically through examining the history of the global development of science and technology from antiquity to the contemporary era.
2. Define and summarize major events, developments, and themes of the history of science and technology from antiquity to the contemporary era.
3. Evaluate significant themes, issues, or eras in the history of science and technology from antiquity to the contemporary era.
4. Demonstrate basic skills in the comprehension and analysis of selected sources and their relevance in the context of historical knowledge.
5. Recognize the differences between original historical source material (primary sources) and later scholarly interpretations of those sources (secondary sources).

6. Develop interpretive historical arguments drawing on primary and/or secondary sources. Identify the sources and functions of values that guide human practices in science and technology.
7. Demonstrate an understanding of the importance of ethics, values and social responsibility in science and technology for individuals and for societies through the history of science and technology.
8. Reflect on how values shape personal and community ethics and decision-making in the context of science and technology.

SAMPLE REQUIRED TEXTS/SUGGESTED READINGS/MATERIALS

1. James E. McClellan and Harold Dorn, *Science and Technology in World History* (Baltimore: Johns Hopkins University Press, 2006). This is the primary textbook. While lectures aren't taken from it, it covers much of the same material.
2. Peter Dear, *The Intelligibility of Nature: How Science Makes Sense of the World* (Chicago: University of Chicago Press, 2006). This is an analysis of the history of science, focusing on overarching change over time. It is a difficult book, in places, but it is essential for this class.
3. Weekly discussion reading and viewing assignments posted to Blackboard (see schedule of classes for specific information).

SAMPLE ASSIGNMENTS AND/OR EXAMS

1. Discussion Posts (15%) -For each reading/watching assignment, you will have a corresponding discussion board. Post your response to the material and to the prompts offered by the professor. These discussion posts should be the springboard for ongoing discussion with your classmates. You will also be required to offer comments on your classmates' posts. You must provide substantial responses to multiple classmates to earn full credit for discussion. Substantial posts and responses consist of several thoughtful comments or questions that push the discussion further. They should build upon each other. Simple fillers, such as "I liked this. I disagreed. Or I don't understand." are not substantial unless accompanied by detailed explanations of why.
2. Discussion Comments (15%) -on your classmates' posts
3. Quizzes (10%) -Quizzes are designed to evaluate comprehension of the assigned textbook readings. They will randomly draw from a pool of questions. There will be a variety of question types, but most of them are open-ended. Quizzes are open book / open note. They are not timed, although Bb sometimes times-out for inactivity. They will be graded by the professor.
Journal Entries (10%) -Journals are private communication between the student and the professor to keep track of adequate progress through the course. For each journal entry, the student must describe what class assignments he/she has completed and an action plan for the next week.
4. Essay Portfolio (50%) -average of 5 writing assignments

