History 385: Science and Technology in Global History
Oberlin College; Spring 2010
Mon./Wed. 2:30-4:20pm

Visiting Assistant Professor Pete Soppelsa
Office: Rice Hall 16
Office Hours: Mon./Wed. 4:30-6:30pm

COURSE DESCRIPTION & OBJECTIVES
Exploring case studies from ancient to modern times, this course investigates the role of science and technology in global history. We'll consider how globalizing practices like trade, migration, capitalism and imperialism shape science and technology, and are shaped by them. We'll discuss the relationship between science and technology, and the broader social, cultural and ecological history of science and technology.

This course has two main goals. The first is to introduce students to central concepts and themes in the history of science and technology. Unlike science courses, this is a course in interpreting science and technology as human practices that exist in social and historical context. The course's second goal is to introduce students to the practice of global history. Because we cannot possibly cover all of the world's history (chronologically or geographically) in one semester, we will concentrate instead on ways that the human experience has been globalized. We will examine targeted 'case studies' that illuminate the role that science and technology play in human life, with special attention to the interaction of science and technology with the process of globalization. This means we'll jump around a lot in space and time. Please consult reference materials if you need more introduction to the places and periods we study.

TEXTBOOKS (available at the Oberlin College bookstore)
Clifford Conner, A People’s History of Science (Nation Books, 2005).
Dorn and McClellan, Science and Technology in World History (Johns Hopkins, 2006).
Sheldon Watts, Epidemics and History: Disease, Power and Imperialism (Yale, 1999).

All other readings available through Blackboard or ERES.

EXPECTATIONS, POLICIES, ASSIGNMENTS
This is a seminar-style course, which demands constant participation and engagement from students. Students must come to class regularly, have completed the readings, and be prepared to discuss them. Warning: the reading load is often heavy. Active participation in class – both speaking and listening – enriches the learning environment for all of us. Learning is a group process; the more we all participate, the more we learn. Any more than two unexcused absences will affect your participation grade. Occassionally we will discuss sensitive or controversial topics in class. Please be respectful, courteous and civil with your fellow students and with me, be attentive and sensitive to what we have to say, and above all use common sense.
Technology Policy
You may use laptops in class to type notes, but please do not browse the web (email, facebook, etc. included). If you pay attention to your web browser instead of what we are doing in class, it is your loss. Please turn off or silence all cell phones and handheld devices; if your phone rings during class, this is not your loss, but disrupts class for everyone else.

Individual Circumstances or Needs
If you have to miss class for religious observance, let me know in advance and your absence and it will not affect your participation grade. If you have a learning disability, physical disability or other special needs, please let me know in the first week of class, provide proper documentation from the Office of Disability Services in Peters Hall and I will do everything I can to help meet your needs.

Assignments and Grading

Weekly Discussion Leader (10%) - each week, one student will "lead" discussion, by posting questions on the web for the class to read, and we'll base our class discussion on these questions. In the week that you lead, you do not have to post a response.

Weekly Response Posts (30% combined) - each week, every student will post 1-2 pages online (site TBA).

General Class Participation (10%) – a general evaluation of your attendance record and contributions to class discussion

Final Paper Proposal (10%) - 2-3 pages, with prospective bibliography, due March 22.

Student Presentation (10%) - oral, in-class presentation of your research paper during the last week of class.

Final Research Paper (30%) - 15-20 pages, due during the final exam period scheduled for this class time. Final papers should have standard margins (1-1.5 inches top, bottom and sides) and be in 11-12 point font. They should be proofread carefully for grammar and spelling. I recommend having someone else (another student from this class, a friend or parent, or a peer tutor at Mudd) proofread your paper for you. Others always notice mistakes in your work more readily than you will. Written work is governed by the Oberlin College Honor Code. Please write or type the text of the Honor Pledge at the end of your paper and sign it by hand. For more info, visit: http://new.oberlin.edu/students/policies/honor/
COURSE SCHEDULE

Note: I reserve the right to make changes in assignments, due dates, etc., but I promise to give you fair warning in advance of any changes.

Week 1: The Neolithic Revolution - Understanding and Domesticate Nature
Mon. Feb. 8 / Wed. Feb. 10

Dorn and McClellan, Sci & Tech in World Hist, Chs. 1-2, pp. 3-30.
Conner, People's History of Science, Ch. 2 "Were Hunter-Gatherers Stupid?" pp. 26-117.

Week 2: Rethinking the "Greek Miracle" - Ancient Science and Technology between Europe, Asia and Africa
Mon. Feb. 15 / Wed. Feb. 17

Conner, People's History of Science, Ch. 3 "What 'Greek Miracle'?" pp. 117-189.
Dorn and McClellan, Sci & Tech in World Hist, Chs. 3-4, pp. 31-98.

Week 3: The Middle Ages - Transferring Technologies and Diseases between Europe, Asia and Africa
Mon. Feb. 22 / Wed. Feb. 24

Watts, Epidemics and History, Ch. 1-2, pp. 1-84.
Dorn and McClellan, Sci & Tech in World Hist, Chs. 5-6,7 and 9 pp. 99-155, 177-203.

Mon. Mar. 1 / Wed. Mar. 3

Conner, People's History of Science, Ch. 4, pp. 197-247.
Dorn and McClellan, Sci & Tech in World Hist, Ch. 8, pp. 155-177.
Watts, Epidemics and History, Chs. 3-4, pp. 84-167.

Week 5: The Scientific Revolution I (Who Were the Revolutionaries?)
Mon. Mar. 8 / Wed. Mar. 10

Conner, People's History of Science, Ch. 5, pp. 248-349.
Dorn and McClellan, Sci & Tech in World Hist, Ch 10, pp. 177-203.

Week 6: The Scientific Revolution II (Who Won the Revolutionary Conflict?)
Mon. Mar. 15 / Wed. Mar. 17

Conner, People's History of Science, Ch. 6, pp. 349-422.
Dorn and McClellan, Sci & Tech in World Hist, Chs. 11-12, pp. 203-276.

Week 7: The Industrial Revolution

* Final Paper Proposal Due

Dorn and McClellan, Sci & Tech in World Hist, Ch. 13, pp. 277-293.
Watts, Epidemics and History, Ch. 5, 167-213.

Week 8: NO CLASSES - SPRING BREAK
**Week 9: The 19th Century I: Capitalism, Science and Technology**
Mon. Apr. 5 / Wed. Apr. 7

Conner, *People’s History of Science*, Ch. 7, 422-449

**Week 10: The 19th Century II: Imperialism, Science and Technology**
Mon. Apr. 12 / Wed. Apr. 14


**Week 11: Social History and Technology in the 20th Century I**
Mon. Apr. 19 / Wed. Apr. 21


**Week 12: Social History and Technology in the 20th Century II**
Mon. Apr. 26 / Wed. Apr. 28

Edgerton, *Shock of the Old*, Chs. 5-8, pp. 103-212.

**Week 13: Constructing Technoscience in the Postwar Era, 1945-1989**
Mon. May 3 / Wed. May 5

Vannevar Bush, "Science the Endless Frontier" (ERES)

**Week 14: Student Research Presentations**
Mon. May 10 / Wed. May 12

Final Papers due during final exam period scheduled for this class time.