

HTS 2100: Science, Technology & the Modern World

Dr. Jenny Leigh Smith

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Class Meets: Tues/ Thurs 1:55-2:35

Office Hours Tues/ Thurs 12:00-1:00

G20 Old Civil Engineering Bldg.

This class provides students with an introduction to how science and technology have influenced politics, culture and society during the 20th and 21st Centuries. Classes will be a mix of lecture and class discussion.



Learning Outcomes: Students will...

- Gain an understanding of topics in the history and sociology of science and technology including ethical behavior in science and medicine, high risk technologies, technology and security, pollution and global medical inequalities.
- Improve their knowledge about current issues and debates in the history and sociology of science and technology including debates about global warming, science education, fossil fuel supplies.
- Understand, synthesize, and analyze the major themes and debates in the history and sociology of science and technology during the 20th and 21st Centuries.

Assessment: Students will...

- Attend every scheduled class session. (15% of grade) Each absence will reduce your grade in the class by 0.5%.
- Answer the “Question of the Day” at least ten times over the course of the semester (10% of grade).
- read approximately 75 pages per week.
- write five short papers of approximately 1000 words each (each worth 5% of grade)
- Students will complete one individual or group project (20% of grade)
- Students will take a midterm (10% of grade, October 2) and a final (20% of grade December 11).

Theme I: science, technology & ethics

Bombing civilian populations (Guernica, Dresden, Hiroshima and Nagasaki)

Vaccine trials. Tuskegee, syphilis experiments in Latin America

Peter Singer and disabled children

Precautionary principle

Week 1 (August 19 & 21)

Week 2 (August 26 & 28)

Week 3 (Sept. 2 & 4) (position paper due at the end of the unit)

Unit II: normal accidents

Book: Perrow: *Normal Accidents*

Challenger, Chernobyl,

Week 4

Week 5: (position paper due at the end of the unit)

Theme III: uncertainty and scientific debate

Book: *Merchants of Doubt*, Oreskes

Evolution, global warming, peak oil

Theme IV: science, technology and security

Bruce Schneier: *Liars and Outliers*

Anti-terrorism, body scanners at airports, facial recognition technology, history of privacy

Theme V:

Kidder, Tracy. *Mountains Beyond Mountains: Healing the World: The Quest of Dr. Paul Farmer*. New York, NY: Random House, 2003. ISBN: 9780375506161.