

IS 122 Technology and European Society
Europe Semester, Fall 2020
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Major Themes for 2020 Europe Semester

Technology
War and Peace
Global Narratives in Literature
Current issues in Europe

Overview of Course

This course considers social phenomena and the development of technology, particularly in Europe. We will look at how technology has affected social structures such as religion and the family. We will examine technology and innovation as a factor in economics, commerce, and education. We will discuss ethical issues in technology from a Christian perspective.

As we look on the impacts of technology we will study both the historical aspects (the reshaping of local society around the cathedrals that were built, the effect of new forms of transportation on land and sea, the effects of the industrial revolution and modern medicine) as well as contemporary issues of technology (with issues such as the digital divide, the green revolution reducing starvation and poverty, bringing clean water to villages). We will examine cathedrals, castles, bridges, and canals as examples of technology. These achievements, along with code-breaking work done during World War II and newer technologies such as the Internet, will be studied in enough technical detail to broaden appreciation for the innovation and complexity required, and to facilitate the understanding of related societal effects.

We will read and evaluate studies in the area of technology and society, and discuss the credibility of various information sources. We will trace the history of the Internet and World Wide Web, and look at current phenomena such as social networks and blogs.

Much of the historical aspects will be focused on during the travels in Europe while the more contemporary issues will be focused on in summer readings. But both will be discussed in lectures and site visits during the trip giving a chance to deepen understandings as the semester proceeds.

Sites

Visits to historical sites and museums will be integral. Example sites include:

- Bletchley Park (early work in computing, breaking of Enigma code)
- Great Fire Monument as scientific instrument and zenith telescope
- Dover Castle and underground tunnels used in World War II
- Stonehenge and Avebury
- Science Museum in London
- Imperial War Museum, Cabinet War Rooms
- Eiffel Tower, Notre Dame, Louvre
- Château de Versailles
- L'Observatoire de Paris (book *The Sun in the Church*, J.L. Heilbron)

- Amsterdam canals, dykes, windmills, battle with the sea
- German Museum of Technology in Berlin
- Prague Castle, Charles IV Bridge, Prague Astronomical Clock
- Canals in Venice
- Brunelleschi's Dome in Florence (Book *Brunelleschi's Dome: How a Renaissance Genius Reinvented Architecture*, Ross King)
- Coliseum
- St. Peter's Basilica, Sistine Chapel
- Pompeii and early technology (aqueducts, road crossings, etc.)

Topics

Example topics for reading, writing, and discussion include:

- Ethical issues in technology
- Gender issues in the development of technology
- The digital divide
- Education and technological development
- Technology and communication
- Early development of science and technology in Europe (pre-1760)
 - Engineering, invention, and architecture of Leonardo da Vinci
 - Construction of castles, cathedrals, towers, bridges, and canals
 - Universal time, clocks
- The industrial revolution (c.1760-1830)
 - Transportation: rail, air, sea, and automobile
 - Effects of industrialization on family structure
- Medical Advances from the middle ages to the present
- Disasters in technology, such as The *Titanic* (1912) and The *Hindenburg* (1937)
- Technological developments during World War I (1914-1918)
- Technological developments during World War II (1939-1945)
 - Early computer development at Bletchley Park
 - The development of the atomic bomb
- The information age
 - Trans-Atlantic cables
 - The development of the Internet and World Wide Web

General Education

This course satisfies the General Education requirement “Understanding Society.” The “Learning Outcome” for this GE category is:

Students will apply appropriate foundational theories to analyze social, political, economic and/or cultural phenomena”

Technology plays a huge role in driving societal change. The cathedrals built in the middle ages were the driving force in developing architecture. Besides centering religion as the centerpiece of community it also became the organizing force for commerce in a region. The role of medicine and the inability to stop the great plague versus subsequent

advances that allowed cholera to be stopped are central to developing European Society. The advance of technology drove the industrial revolution that reshaped Europe but before that, the development of the triangular sail (allowing ships to sail against the wind) and navigation allowed the exploration of the world. These are just a few examples of technology as an explanation for social, political, economic and cultural phenomena.

The core objectives, as described by General Education documents and tailored for this course, are:

- Students will have a basic understanding of social or cultural phenomena examining, in particular, basic social institutions such as: family and marriage, religion, education, and gender.
- Students should be able to analyze social situations using the framework of technology as a lens.
- Students will acquire basic competence to read studies and understand claims about social phenomena and technology.

Several desired extensions, also taken from the General Education documents, are:

- Students should understand the nature of technology and innovation as social phenomena.
- Students should be able to identify ways in which gender and ethnicity play a role in social structures and access to technological resources.
- Students should reflect on the applications of contemporary technological advances and their impact on personal relationships, research methodologies, the inquiry process, and the accumulation and dissemination of new knowledge.
- Students can identify instances and possible causes of inequity and stratification, including the digital divide along socio-economic and ethnic boundaries, and the under-representation of women and people of color in technological development.

Student achievements in these areas will be assessed primarily in the two major papers but also in the analysis of the three sociological studies they write about.

Required textbooks:

Technology and Society

Jan L. Harrington

Publisher: Jonas and Bartlett

Copyright Year © 2009

Ebook

http://www.coursesmart.com/9780716776260?_professorview=false&_instructor=1109894

Suggested Readings:

Connections

James Burke

Publisher: Simon and Schuster
Copyright Year © 1995 304 pages
Paperback or ebook

Sociology: A Down-to-Earth Approach, Tenth Edition

James M. Henslin

Publisher: Pearson

Copyright year: © 2010 Pages: 792

eText

ISBN-10 0-205-72760-3

http://www.coursesmart.com/9780205727605?_professorview=false&_instructor=1109894

A Guide to Writing Sociology Papers, 6th Edition

Sociology Writing Group

Publisher: Worth Publishers

Copyright year: © 2008 Pages: 352

eText

ISBN-10 1-4292-2290-5

Preparatory Assignments (completed during the summer)

- Over the summer, students will read selected chapters in the two required textbooks
- Over the summer, students will write a summary and critique of each of three different sociological studies. These assignments are designed to introduce you to sociological thought and studies. The textbook readings will give you some foundation in responding to the studies you are expected to use critical thinking to determine the validity of the conclusions drawn.

Initial Paper: Contemporary Technology (completed by end of time in Berlin)

In contrast to the final paper which will have more of a focus on historical development of technology and preferably a focus on Europe in particular, this paper will focus on the impact (good and bad) on modern society. It can have a focus on Europe (and examples from the sites in Europe are always encouraged) but doesn't have to. Examples might include:

- Causes and solutions to climate change
- The digital divide: equal access to the Internet?
- Modern agriculture: GMO's: feeding the world or a bane?
- E-commerce vs brick and mortar; Walmart vs Mom and Pop
- Social networking vs privacy
- Science and medicine (cloning? Stem cells?)
- Technology and Politics

Final Paper (completed at the end of the time in Europe)

- At the end of the time in Europe, students will write a paper in which they reflect on:

- the examples of technology they have seen in Europe,
- the ways in which technology has influenced European society,
- the ways in which European society has influenced the development of technology, and
- the ways in which what they have observed, learned and experienced in Europe relates to their preparatory assignments.

Grading

- Modern paper 30%
- Critique of studies 30%
- Class participation 10%
- Final reflective paper 30%

Academic Honesty

Plagiarism will not be tolerated and will result in an F for the assignment. Repeated or major violations will result in an F for the course.

“To plagiarize is to present someone else's work—his or her words, line of thought, or organizational structure—as our own. This occurs when sources are not cited properly, or when permission is not obtained from the original author to use his or her work. By not acknowledging the sources that are used in our work, we are wrongfully taking material that is not our own. Plagiarism is thus an insidious and disruptive form of dishonesty. It violates relationships with known classmates and professors, and it violates the legal rights of people we may never meet.

“Another person's ‘work’ can take many forms: printed or electronic copies of computer programs, musical compositions, drawings, paintings, oral presentations, papers, essays, articles or chapters, statistical data, tables or figures, etc. (The Learning Skills Centre, 1999). In short, if any information that can be considered the intellectual property of another is used without acknowledging the original source properly, this is plagiarism.”

From *Westmont College Plagiarism Policy*,

<http://www.westmont.edu/academics/pages/provost/curriculum/plagiarism/>.