Course Description and Goals

In high income societies, more so than in low income societies, most social processes and the functioning of primary social institutions are increasingly being mediated by various forms of technology. Thus ours, more than previous generations, has appropriately been described as “age of technology”. Commenting on the centrality of technology in human society over the centuries Habermas (1970:87), argues that “there is an immanent connection between technology known to us and the structure of purposive-rational action.” This is partly because technical implements substitute, supplement, augment and expand what humans have to, and can do. To the extent that it performs these critical functions in helping us to better understand, and sometimes control, our social and natural environments, it may be concluded that technology is very beneficial. This golden view of technology is, however, tempered by the fact that the development and deployment of technology are almost exclusively shaped by instrumental rationality. The latter implies that technology in its various manifestations can be socially disruptive, especially with regard to the norms and values infrastructure of society. Can such disruptions have socially “useful” or redeeming qualities? In light of such disruptions and the rapid pace of technological changes should factors other than technical and economic efficiency and efficacy necessarily guide the development and use technologies?

This course examines these critical sociological questions and issues by exploring the social dimensions of technology. This course highlights interactions and interrelationships between the technological and social worlds.

This course will primarily consist of lectures, in-class student presentations/discussions and student review papers.

Required Text


Recommended Text

Course Requirements

Attendance
Class attendance is expected of all students and will be excused *only in serious documented cases*, such as medical emergencies. Past experience indicates that students who attend and participate in class tend to be more successful. Besides, the structure of this class requires students to come to class prepared to engage in the learning process through critical discussion of techno-society issues. Active participation is influenced by regular attendance. Thus multiple absences will automatically lead to reduction in final grade as explained below.

Participation
Students are expected to come to class ready to participate in discussions each week. A significant amount of time will be devoted to discussion of readings and associated sociotechnical issues and other relevant materials. 120 points of the overall grade for the class will be determined by class participation, which should reflect completion of short periodic written assignments as well as attendance. There will be no make-up for the short periodic written assignments. Participation, including making verbal contributions in class is expected, and will be noted. If there is any reason why a student cannot participate in class that student should notify the instructor and provide the necessary supporting evidence. To highlight the importance of attendance to participation *students with 4 or more unexcused absences will automatically lose 40 of the 120 points allotted for participation*. It should be emphasized that excused absences will be on the basis of serious documented cases only.

Regular Assignments
Besides the required participation, students will be expected to complete *two main written assignments* (series of short chapter reviews and a final research paper), and *one individual or group summary class presentation* over the course of the semester.

I. Students will write short 4-6 page review papers for readings starting with Part 2. There will be 4 reviews in total as outlined below, and the reviews will be collected on the dates specified on the last page of this syllabus. Students may submit the reviews before the due dates but not after. Students can introduce supplemental information from outside the textbook in their reviews. **Only hard copies** (no electronic submissions), of review papers will be accepted. Each review paper will be worth **100 points**. So the total grade for the 4 reviews will be **400 points** of the final grade. The review papers should include summation of major points covered by the chapters in the particular section as well as analyses of sociotechnical issues addressed in the assigned readings. Each review should conclude with a brief analysis of how well the chapters capture the central theme conveyed by the title of the section/part that the chapters fall under.

II. Students will write a research paper on a technology and society issue of their choosing (sample topics are provided below on page 7). **Alternatively** students can identify and track and write a comprehensive report on a technology of interest such as siri, “airtime”, etc., or sociotechnical phenomenon such as the so-called “Gerontabletification”, “connect2compete” The research paper or the comprehensive
report should have a clear thesis statement, incorporate relevant theoretical perspective/s, adduce appropriate evidence to discuss your thesis, and include proper documentation of evidence and sources. The research paper or comprehensive report should range from 6-8 pages in length for individual papers and 10-12 pages for group projects. The papers will be due on November 19. See additional information below.

a) In the case of a group project each student (group member) will receive the same grade earned for the joint paper/report

b) Research papers should be typed in double space using 12 font and 1 inch margins. Ten scholarly sources should be cited for group research papers/reports and five scholarly sources for individual papers/reports

c) Students should use the ASA referencing style (for a description see the following link (http://www.asanet.org/quick style guide.pdf)

d) The “tracking assignment” will be further discussed in class

e) Research papers or the comprehensive report will not be accepted after the due date of November 19, 2012

III. Each student or a group of 2-3 students will prepare and make a class presentation on one of the chapters during the semester starting with chapter 7. Presentations should highlight the main points and/or arguments in the chapter, students’ personal perspectives on the issue/s addressed in the chapter, and finish with several short questions to facilitate class discussion. The presentations need to incorporate short and relevant webcasts or streaming videos, examples of which can be found at www.ted.com, http://uc.princeton.edu/main/, and from other web sources. The class presentations will be for about 30 minutes each, and will be done on the basis of selected or assigned chapters, and will begin around mid-to–late September 2011.

IV. Extra credit opportunities may be available throughout the semester. No extra credit opportunities will be given to individuals beyond any offered to the entire class. If an extra credit opportunity is offered at a time when a student is absent from class, no special provision will be made for that student to “make up” the extra credit assignment.

Course Evaluation

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<tr>
<th>Class Participation</th>
<th>120 points</th>
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<tr>
<td>Four Reading/Chapter Reviews/Syntheses</td>
<td>400 points</td>
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<tr>
<td>In-Class Presentation of Chapter Summaries</td>
<td>180 points</td>
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<tr>
<td>Research Paper OR Technology/Sociotechnical Phenomenon Tracking Assignment</td>
<td>300 points</td>
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Evaluation:

900-1000=A; 800-899=B; 700-799=C; 600-699=D; less than 600=F
Course Outline (This outline may be altered to accommodate contingencies)

PART 1  Aug 20 – Sept 5  VISIONS OF A TECHNOLOGICAL FUTURE
Course Overview: Nature of Technology and Theoretical Perspectives
Technology and Social Justice  Johnson and Jameson Chap. 1
The Machine Stops  Johnson and Jameson Chap. 2
The Prolongation of Life  Johnson and Jameson Chap. 3
Reproductive Ectogenesis...  Johnson and Jameson Chap. 4
Nanotechnology: Shaping the World Atom by Atom  Johnson and Jameson Chap. 5
Why the Future Doesn’t Need Us  Johnson and Jameson Chap. 6

PART 2  Sept 10 – 26  THE RELATIONSHIP BETWEEN TECHNOLOGY AND SOCIETY
Do Machines Make History?  Johnson and Jameson Chap. 7
The Social Construction of Facts and Artifacts  Johnson and Jameson Chap. 8
Technological Momentum  Johnson and Jameson Chap. 9
Where Are the Missing Masses? ...  Johnson and Jameson Chap. 10
Code Is Law  Johnson and Jameson Chap. 11
The Intersection of Culture, Gender, and Technology  Johnson and Jameson Chap. 12

PARTS 3  Oct 1 - 17  TECHNOLOGY AND VALUES
Do Artifacts Have Politics?  Johnson and Jameson Chap. 13
Control: Human and Nonhuman Robots  Johnson and Jameson Chap. 14
White  Johnson and Jameson Chap. 15
Manufacturing Gender ...  Johnson and Jameson Chap. 16
Pas de Trois: Science, Technology, & the Marketplace  Johnson and Jameson Chap. 17
Amish Technology: Reinforcing Values and ...  Johnson and Jameson Chap. 18

PART 4  Oct 22 - Nov 7  THE COMPLEX NATURE OF SOCIOTECHNICAL SYSTEMS
Will Small Be Beautiful? ...  Johnson and Jameson Chap. 19
Sociotechnical Complexity: ...  Johnson and Jameson Chap. 20
The Naked Launch: ...  Johnson and Jameson Chap. 21
Bodies, Machines, and Male Power  Johnson and Jameson Chap. 22
Crash!: Nuclear Fuel Flasks and Anti-Misting Kerosene ...  Johnson and Jameson Chap. 23
When Is a Work Around?...  Johnson and Jameson Chap. 24
PART 5  Nov 12 – Dec 5  TWENTY-FIRST-CENTURY CHALLENGES

Shaping Technology for the 'Good Life': ...  Johnson and Jameson Chap. 25
The Feminization of Work in the Information Age  Johnson and Jameson Chap. 26
Nanotechnology and the Developing World  Johnson and Jameson Chap. 27/28
People's Science in Action: ...  Johnson and Jameson Chap. 29
Security Trade-Offs Are Subjective and ...  Johnson and Jameson Chap. 30
Questioning Surveillance and Security  Johnson and Jameson Chap. 31
Energy, Society, and Environment: ...  Johnson and Jameson Chap. 32
Introduction to Environmental Justice: ...  Johnson and Jameson Chap. 33
Icarus 2.0: A Historian's Perspective on ...  Johnson and Jameson Chap. 34
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<tr>
<th>DATE</th>
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<tr>
<td>Sept 3</td>
<td>Labor Day Break/Holiday (no class)</td>
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<td>Oct 12</td>
<td>Last day to withdraw without academic penalty</td>
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<tr>
<td>Nov 21-25</td>
<td>Fall Break (no classes)/university closed</td>
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<td>Nov 19</td>
<td>Research Paper Due</td>
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**STUDENT CODE OF CONDUCT:**

Students are expected to follow the Kennesaw State University’s Student Code of Conduct at all times. In addition, cell phones must be put on silence/vibrate during class, and laptops, iPads, MP3 Players, etc. must be turned off. The instructor may approve written requests for use of laptop or iPad for notes-taking (not activities unrelated to the class). If you need to answer a call or text, please quietly step outside the classroom. Failure do so may result in your being asked to leave the class for that day. Tardiness will not be tolerated. A student who is more than 15 minutes late for class should not walk in and disrupt the class. That student will be considered as having been absent.

**Academic Integrity**

Each KSU student is responsible for upholding the provisions of the Student Code of Conduct, as published in the Undergraduate and Graduate Catalogs. Section II of the Student Code of Conduct addresses the University’s policy on academic honesty, including provisions regarding plagiarism and cheating, unauthorized access to University materials, misrepresentation/falsification of University records or academic work, malicious removal, retention, or destruction of library materials, malicious/intentional misuse of computer facilities and/or services, and misuse of student identification cards. Incidents of alleged academic misconduct will be handled through the established procedures of the University Judiciary Program, which includes either an “informal” resolution by a faculty member, resulting in a grade adjustment, or a formal hearing procedure, which may subject a student to the Code of Conduct’s minimum one semester suspension requirement.

**Quality Writing Is Expected**

The KSU Writing Center is a free service offered to all KSU students. Experienced, friendly writing assistants work with you on thesis development, organization, research documentation, grammar, and much more. They help you improve your paper AND teach you strategies to become a better writer on your own. For more information or to make an appointment, visit [http://www.kennesaw.edu/english/WritingCenter](http://www.kennesaw.edu/english/WritingCenter), or stop by Room 242 in the English Building.
POSSIBLE RESEARCH TOPICS

NOTE: You are not required to choose your research topic from this suggested list. You can come up with your own research topic, and the topic should be relevant to this course.

1. A description of two dimensions of the “digital divide” and the associated “time-wasting gap”, and a discussion of their societal implications

2. Analysis of the role of the state compared with the private sector in technological innovation

3. Critical assessment of the role of technological innovations in sociocultural globalization

4. Identification and discussion of the transition of military technologies into civilian uses and their societal effects

5. A critical review of impacts of two technologies on the physical environment

6. Analysis of the implications and impact of communication technology on politics and governance

7. Assessment of the relationship between technological innovations and quality of life in contemporary society

8. Review of the role of technology in intergenerational cohesion or disengagement

9. Assessment of the impacts of a technological innovation of your choice on one social institution in the U.S

10. Analyses of the impact surveillance technologies on civil liberties
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<th>SECTIONS/PARTS</th>
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<tr>
<td>PART 2 THE RELATIONSHIP BETWEEN TECHNOLOGY AND SOCIETY</td>
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<td>9/10</td>
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<td>PARTS 3 TECHNOLOGY AND VALUES</td>
<td>2\textsuperscript{nd}</td>
<td>10/8</td>
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<td>PART 4 THE COMPLEX NATURE OF SOCIOTECHNICAL SYSTEMS</td>
<td>3\textsuperscript{rd}</td>
<td>10/29</td>
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<tr>
<td>PART 5 TWENTY-FIRST-CENTURY CHALLENGES</td>
<td>4\textsuperscript{th}</td>
<td>11/7</td>
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