

SOCI 3333 (01) **TECHNOLOGY AND SOCIETY** Fall 2014

**Instructor:** Sam Abaidoo, Ph.D.

**Class Time:** M/W 11:00-12:15 PM

**Office:** SO 4058

**Meeting Place:** SO 3007

**Office Hours:** M/W 2:00-3:30PM  
OR by appointment

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(This is the preferred means of communication)

### **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 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**

Johnson Deborah G. and Jameson M. Wetmore (eds.) 2009 *Technology and Society: Building Our Sociotechnical Future*: Cambridge, MA: Massachusetts Institute of Technology.

### **Recommended Text**

Volti, Rudi 2010. *Society and Technological Change* (6<sup>th</sup> edition), New York: Worth Publishers.

## 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 in class is dependent on regular attendance. Thus multiple absences will lead to less participation automatically a 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 of readings starting with Part 2 of the textbook. 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 at least 2 chapters in the particular section as well as critical analyses of sociotechnical issues addressed in the chapters reviewed. 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 “3D printing”, “synthetic biology” “Leap Motion Controller”, “In Vitro Burger”, “Buoyant Airborne Turbine”, or BAT etc., or sociotechnical phenomenon such as the

“*quantified self*” health movement”. 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 17***. See 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** (for explanation of scholarly sources - <http://www.globeeducationnetwork.com/library/research-guides/scholarly-sources/>)
- 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 17**

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 should include materials from outside text, and also incorporate short and relevant streaming videos, examples of which can be found at [www.ted.com](http://www.ted.com), 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 mid-to-late Sept 2013.

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**

<b>Class Participation</b>	<b>120 points</b>
<b>Four Reviews</b>	<b>400 points</b>
<b>In-Class Presentation</b>	<b>180 points</b>
<b>Research Paper OR Technology/Sociotechnical Phenomenon Tracking Assignment</b>	<b>300points</b>

<b>Evaluation:</b>		
<b>900-1000=A;</b>	<b>800-899=B;</b>	<b>700-799=C;</b>
<b>600-699=D;</b>	<b>less than 600=F</b>	

**Course Outline** (This outline may be altered to accommodate contingencies)

**PART I** Aug 18 – Sept 3 **VISIONS OF A TECHNOLOGICAL FUTURE**

Course Overview: Nature of Technology and Theoretical Perspectives

Technology and Social Justice	Johnson and Jameson <i>Chap. 1</i>
The Machine Stops	Johnson and Jameson <i>Chap. 2</i>
The Prolongation of Life	Johnson and Jameson <i>Chap. 3</i>
Reproductive Ectogenesis...	Johnson and Jameson <i>Chap. 4</i>
Nanotechnology: Shaping the World Atom by Atom	Johnson and Jameson <i>Chap. 5</i>
Why the Future Doesn't Need Us	Johnson and Jameson <i>Chap. 6</i>

**PART II** Sept 8 –24 **THE RELATIONSHIP BETWEEN TECHNOLOGY AND SOCIETY**

Do Machines Make History?	Johnson and Jameson <i>Chap. 7</i>
The Social Construction of Facts and Artifacts	Johnson and Jameson <i>Chap. 8</i>
Technological Momentum	Johnson and Jameson <i>Chap. 9</i>
Where Are the Missing Masses? ...	Johnson and Jameson <i>Chap. 10</i>
Code Is Law	Johnson and Jameson <i>Chap. 11</i>
The Intersection of Culture, Gender, and Technology	Johnson and Jameson <i>Chap. 12</i>

**PARTS III** Sept 29 – Oct 15 **TECHNOLOGY AND VALUES**

Do Artifacts Have Politics?	Johnson and Jameson <i>Chap. 13</i>
Control: Human and Nonhuman Robots	Johnson and Jameson <i>Chap. 14</i>
White	Johnson and Jameson <i>Chap. 15</i>
Manufacturing Gender ...	Johnson and Jameson <i>Chap. 16</i>
Pas de Trois: Science, Technology, & the Marketplace	Johnson and Jameson <i>Chap. 17</i>
Amish Technology: Reinforcing Values and ...	Johnson and Jameson <i>Chap. 18</i>

**PART IV** Oct 20 – Nov 5 **THE COMPLEX NATURE OF SOCIOTECHNICAL SYSTEMS**

Will Small Be Beautiful? ...	Johnson and Jameson <i>Chap. 19</i>
Sociotechnical Complexity: ...	Johnson and Jameson <i>Chap. 20</i>
The Naked Launch: ...	Johnson and Jameson <i>Chap. 21</i>
Bodies, Machines, and Male Power	Johnson and Jameson <i>Chap. 22</i>
Crash!: Nuclear Fuel Flasks and Anti-Misting Kerosene ...	Johnson and Jameson <i>Chap. 23</i>
When Is a Work Around?...	Johnson and Jameson <i>Chap. 24</i>

**PART V**    Nov 10 – Dec 3**TWENTY-FIRST-CENTURY CHALLENGES**

Shaping Technology for the 'Good Life': ...	Johnson and Jameson <i>Chap. 25</i>
The Feminization of Work in the Information Age	Johnson and Jameson <i>Chap. 26</i>
Nanotechnology and the Developing World	Johnson and Jameson <i>Chap. 27/28</i>
People's Science in Action: ...	Johnson and Jameson <i>Chap. 29</i>
Security Trade-Offs Are Subjective and ...	Johnson and Jameson <i>Chap. 30</i>
Questioning Surveillance and Security	Johnson and Jameson <i>Chap. 31</i>
Energy, Society, and Environment: ...	Johnson and Jameson <i>Chap. 32</i>
Introduction to Environmental Justice: ...	Johnson and Jameson <i>Chap. 33</i>
Icarus 2.0: A Historian's Perspective on ...	Johnson and Jameson <i>Chap. 34</i>

<b>DATE</b>	<b>EVENT</b>
Sept 1	Labor Day Break (no class)
Oct 8	Last Day to Withdraw Without Academic Penalty
Nov 24-30	Fall Break (no classes)/university closed
Nov 17	Research Paper <b>OR</b> Tracking Assignment Report Due

## INFORMATION FOR STUDENTS

### ACADEMIC ATTENDANCE:

"Students are solely responsible for managing their enrollment status in a class; nonattendance does not constitute a withdrawal."

### 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, etc. (not for activities unrelated to the class).

If you need to answer a call or text, please quietly step outside the classroom. Failure to 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 – Plagiarism and Cheating Statement

"No student shall receive, attempt to receive, knowingly give or attempt to give unauthorized assistance in the preparation of any work required to be submitted for credit (including examinations, laboratory reports, essays, themes, term papers, etc.). Unless specifically authorized, the presence and/or use of electronic devices during an examination, quiz, or other class assignment is considered cheating. Engaging in any behavior which a professor prohibits as academic misconduct in the syllabus or in class discussion is cheating. When direct quotations are used, they should be indicated, and when the ideas, theories, data, figures, graphs, programs, electronic based information or illustrations of someone other than the student are incorporated into a paper or used in a project, they should be duly acknowledged. No student may submit the same, or substantially the same, paper or other assignment for credit in more than one class without the prior permission of the current professor(s)" (KSU Department of Student Conduct and Academic Integrity).

### Quality Writing Is Expected

"The KSU Writing Center helps students in all disciplines improve their written work. Experienced, friendly writing assistants work with you on topic development, revision, research, documentation, grammar, and more. For more information or to make an appointment, visit [www.kennesaw.edu/writingcenter](http://www.kennesaw.edu/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 critical analysis of the societal implications of the so-called “big data” and surveillance
2. Critical assessment of the incidence and implications of employer-deployed monitoring technology at the workplace
3. Analyses of whether Amazon will lead to demise of paper book publishers and the societal implications of that possibility
4. A critical review of impacts of social media on the public as citizens and as employees
5. Analysis of the role of the state compared with the private sector in technological innovation
6. Analysis of the implications and impact of communication technology on politics and governance
7. Critical assessment of the role of technological innovations in sociocultural globalization
8. A critical review of impacts of two technologies on the physical environment
9. Assessment of the relationship between medical technological innovations and quality of life in contemporary society
10. Assessment of the impacts of a technological innovation of your choice on one of the primary social institutions (Education, Economy, Family, Government/Politics, Religion,) in the U.S

## Due Dates for Section Reviews and Syntheses

(Each review should cover at least 2 chapters from each Section/Part)

SECTIONS/PARTS	Reviews	Due Dates
<b>PART II</b> THE RELATIONSHIP BETWEEN TECHNOLOGY AND SOCIETY	1 <sup>st</sup>	Sept. 8
<b>PARTS III</b> TECHNOLOGY AND VALUES	2 <sup>nd</sup>	Oct. 6
<b>PART IV</b> THE COMPLEX NATURE OF SOCIOTECHNICAL SYSTEMS	3 <sup>rd</sup>	Oct. 27
<b>PART V</b> TWENTY-FIRST-CENTURY CHALLENGES	4 <sup>th</sup>	Nov. 5