# **Technology and Society**

### Sociology 415

**Instructor: Jonathan Dial** 

Time: Tuesdays & Thursdays; 10:30am – 11:45am

Location: Saunders 244

Office Hours: Wednesdays 11:30am-1:30pm or by appointment

Office: Saunders 211

Email: dialjonathan@gmail.com

# **Class Objectives:**

This course will explore the sociological perspective on the relationship between technology and society. Readings will be drawn from texts both within and outside of the discipline of sociology. Many people believe that changes in technology necessarily lead to changes in society, and we can see that this is true in some cases. However, others (especially sociologists) contend that social forces shape technology, and we can see that this is true in other cases. Some argue that the relationship between society and technology is reciprocal. Through a wide range of academic articles, this course will examine each of these arguments in depth, as well as the history of technology, case studies of old and new technologies, and possibilities for the future.

Students in this course will develop a familiarity with relevant academic literature and hone critical thinking skills to understand how both science and technology are shaped by social factors and how society itself is molded by technological advancement and scientific knowledge. In order to foster that development, writing assignments will call upon students to determine their own opinions, express them, and support their stances using academic sources. Hence, students will be expected to keep up with and understand the assigned readings, as well as to participate in class discussions.

The first paper will be a response to a question(s) that will require engagement with assigned readings as well as bringing in outside sources. The final paper will take the form of a research proposal on a topic chosen by the students.

# **Readings & Quizzes:**

You are expected to have readings completed by the day they are assigned in order to participate in and contribute to the class discussion. There will be a brief quiz on the readings at the beginning of each class on the day on which they will be discussed. These quizzes will comprise the largest portion of overall grades for the course.

# **Textbook:**

Science, Technology, and Society: A Sociological Approach. (2006). Written by Wenda K. Bauchspies, Jennifer Croissant, and Sal Restivo. ISBN: 978-0-631-23210-0

# **Supplemental Readings:**

Assigned articles from academic journals, books, and edited volumes will be posted to Laulima.

#### **Presentations**

Each student will choose one of the assigned readings and will provide a 20-minute presentation to the class on the day of that article's discussion. Presentations should summarize the article, clarify its concepts and/or theories, and relate it to other assigned literature. Visual aids are welcome but not required, and the format of presentations is flexible. Students are encouraged to set meetings with the instructor prior to presentations in order to discuss the literature.

# Written Work

Written work for this course is comprised of three parts and is expected to adhere to the American Sociological Association's (ASA) citation guidelines. All writing is expected to be grammatically correct, purposeful, and coherent. We will discuss the guidelines and expectations of the writing assignments in greater detail in class. Written assignments **must be submitted via email in Microsoft Word format**.

- (1) Students will compose a 4-page summary of and reaction to the article selected for their presentation. No more than two pages should be devoted to summarizing the content. The remaining space will convey the student's reactions to the concepts, theories, and arguments conveyed in the material, with an emphasis on how it relates to other literature covered in class. These papers are **due exactly one week prior to presentations** and will assist in preparing for presentations.
- (2) A midterm paper (5-6 pages) will take the form of a written response to questions designed to gauge students' familiarity, understanding, and engagement with the assigned readings covered up to that point in the course. Students will compare and contrast the concepts and theories found in the readings, choose an argumentative perspective, and support that stance with citations from assigned readings as well as outside sources. One week will be given to complete the response.
- (3) The final paper is a full research proposal (10 pages) that will seek to analyze a specific technology, concept or theory discussed in the course, or another relevant topic chosen by the student and approved by the instructor. The proposal's requirements include an Introduction, Literature Review, Data & Methods, Expected Findings & Analysis, and References.

# **Attendance and Participation**

As this class relies heavily upon class discussions, your presence is mandatory. Attendance will be taken daily and will count toward your overall grade. However, simply attending class is not the same as contributing to the discussion. Consequently, students who attend class but do not participate in the discussion may be counted as absent.

# **Grading:**

Quizzes30%Presentation15%Presentation Paper15%Midterm Paper15%Research Proposal15%Attendance/Participation10%

# **CLASS SCHEDULE**

Week 1 8/23/16 8/25/16	Introduction Leo Marx: Technology: The Emergence of a Hazardous Concept (Laulima)
Week 2 8/30/16 9/1/16	Leo Marx: Does Improved Technology Mean Progress? Chapter 1: Introduction (Textbook) Deadline for selecting presentations
Week 3 9/6/16 9/8/16	Nye: Does Technology Control Us? (Laulima) Pinch and Bijker: The Social Construction of Facts and Artifacts: Or How the Sociology of Science and the Sociology of Technology Might Benefit Each Other (Laulima)
Week 4 9/13/16 9/15/16	James Fallows: The American Army and the M-16 Rifle (Laulima) Sergio Sismondo: Actor-Network Theory
Week 5 9/20/16 9/22/16	Besel: Opening the Blackbox of Climate Change Science (Laulima) Langdon Winner: Artifact/Ideas and Political Culture (Laulima)
Week 6 9/27/16 9/29/16	Chapter 2: Cultures of Science (Textbook) – Read pp. 19-36 Chapter 2: Cultures of Science (Textbook) – Read pp. 36-48
Week 7 10/4/16 10/6/16	Albert and Kleinman: Bringing Pierre Bourdieu to Science and Technology Studies (Laulima) Ruth Schwartz Cowan: The Industrial Revolution in the Home (Laulima)
<b>Week 8</b> 10/11/16	Callon and Bowker: Is Science a Public Good? (Laulima)

10/13/16	Chapter 3: The Dance of Truth (Textbook) (Midterm Paper Questions Assigned Today)
Week 9	
10/18/16	Selwyn: Making sense of young people, education, and digital technologies (Laulima)
10/20/16	David R. Johnson: Technological Change and Professional Control in the Professoriate (Laulima) (Midterm Paper Response Due 10/21/16)
Week 10	
10/25/16	Discussion on Research Proposals
10/27/16	Chapter 4: STS and Power in the Modern World – Pages 73-90 (Textbook)
Week 11	
11/1/16	Elison and boyd: Sociality Through Social Network Sites
11/3/16	Bucher: The Friendship Assemblage: Investigating Programmed Sociality on Facebook (Laulima)
Week 12	
11/8/16	NO CLASS: ELECTION DAY
11/10/16	Tufekci and Wilson: Social Media and the Decision to Participate in Political Protest: Observations From Tahrir Square (Laulima)
Week 13	
11/15/16	Marwick and boyd: I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience (Laulima)
11/17/16	Tufekci: Engineering the Public (Laulima)
Week 14	
11/22/16	Bill Joy: Why the Future Doesn't Need Us (Laulima)
11/24/16	NO CLASS: THANKSGIVING DAY
Week 15	
11/29/16	John Seely Brown and Paul Duguid: Don't Count Society Out (Laulima)
12/1/16	Allenby: Are New Technologies Undermining the Laws of War? (Laulima)
Week 16	
12/6/16	Coveney, Gabe, and Williams: The sociology of cognitive enhancement (Laulima)
12/8/16	Marks and Russell: Public Engagement in Biosciences and Biotechnologies (Laulima)

# \*\*Research Proposal Due: 12/13/16\*\*

# The Sociology Department has established three Student Learning Outcomes (SLOs) that support the Institutional Learning Objectives:

- o SLO 1: Students will be able to evaluate sociological theories and use them to analyze and understand aspects of the social world.
- o SLO 2: Students will be able to collect, analyze, and interpret data, and draw valid conclusions from their analyses.
- o SLO 3: Students will have clear and effective verbal and written communication skills.

# Additionally, Student Learning Objectives for this course include:

- Improving abilities to clearly and effectively communicate about the relationship between science, technology, and society;
- Developing familiarity with sociological concepts around the issues of technology and science:
- Learning to independently search for and analyze empirical data and literature from scholarly sources;
- Understanding one's own beliefs, misconceptions, and expectations about technology; and,
- Designing a research agenda.

## Kokua

Any student in need of additional help, due to disability, can contact me personally and the KOKUA program officer to discuss ways to accommodate specific needs. KOKUA can be reached at (808) 956-7511 or (808) 956-7612 or by email (kokua@hawaii.edu). The KOKUA office is located in room 013 of the Queen Lili'uokalani Center for Student Services.

# **Plagiarism**

"Plagiarism includes, but is not limited to, submitting, to satisfy an academic requirement, any document that has been copied in whole or in part from another individual's work without identifying that individual; neglecting to identify as a quotation a documented idea that has not been assimilated into the student's language and style; paraphrasing a passage so closely that the reader is misled as to the source; submitting the same written or oral material in more than one course without obtaining authorization from the instructors involved; and "dry-labbing," which includes obtaining and using experimental data from other students without the express consent of the instructor, utilizing experimental data and laboratory write-ups from other sections of the course or from previous terms, and fabricating data to fit the expected results."

- University of Hawai'i at Manoa Student Conduct
- < http://www.catalog.hawaii.edu/about-uh/campus-policies1.htm>

It is ultimately each student's responsibility to learn about plagiarism and how to avoid it. Ignorance of the rules, saying "I forgot about that" or "I made a mistake" are not considered valid excuses when it comes to plagiarism.