Fall 2021

STS 201-015: Understanding Technological Society

Katherine Tyrol

New Jersey Institute of Technology
Understanding Technological Society
STS 201
Fall 2021

Instructor: Dr. Kate Tyrol
Office: 310 Cullimore Hall (Masks always required)
Contact: katherine.a.tyrol@njit.edu

Office Hours:
Tuesdays 12:30 – 1:30
Wednesdays 9 – 9:50
(Masks required)

Course Meeting Time and Location:
Mondays and Wednesdays, 11:30 AM – 12:50 PM
Faculty Memorial Hall 321
(Masks required)

Canvas: https://njit.instructure.com/courses/18997

Texts

No textbook is required. Readings will be made available through Canvas.

Catalog Description

A problem-centered and task-oriented course that integrates social science theory and practice into the leading public issues of a technological society. Students learn critical thinking through hands-on assignments. The course emphasizes student understanding of social institutions that directly affect technological development and professional careers. This course can be used to satisfy either the three credit 200 GER in History and Humanities or the three credit GER in Social Sciences, but not both.

Prerequisites: None

Course Objectives

In this course, students will:

- Practice articulating their ideas in written and oral formats

- Learn concepts including technological determinism, the social construction of science, human-centered design and standpoint theory through:

    o Regular assigned readings

    o Class exercises

    o Class discussion

    o Questions to the instructor in writing or in class discussion

- Demonstrate their understanding of course concepts by:

- o Stating what they've learned in writing and in class discussion
- o Applying the concepts they've learned in new contexts through writing a final analytic paper

Policies

University Policy on Academic Integrity

"Academic integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at:

http://www5.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf.

"Please note that it is the instructor's professional obligation and responsibility to report any academic misconduct to the Dean of Students' Office. **Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university.** If you have any questions about the code of Academic Integrity, please contact the Dean of Students' Office at dos@njit.edu."

While this text was written by the university, I stand behind it whole-heartedly and fully expect you to adhere to these guidelines, as will I.

Accessibility

This class is intended to be entirely available to students regardless of health or disability status (whether mental or physical). If you need reasonable accommodations to complete the course because of a disability, you can reach out to the course instructor or to the office of accessibility resources and services.

Course Environment

This course should be a safe space: in the classroom, in one-on-one discussions with the instructor, and in online spaces for this course. This means no hate speech (slurs or derogatory or demeaning comments) and no bullying. You are expected to treat your classmates respectfully and with kindness, generosity, and empathy.

Assignment Submission

All assignments are to be submitted through Canvas unless other arrangements are made with the instructor. Files must be of type .doc, .docx, .pdf, or .txt unless otherwise instructed. *Google Docs are NOT acceptable.*

Should you encounter technical problems, contact the NJIT helpdesk at 973-596-2900 (or simply extension 2900 from campus locations). In the event that it is impossible to submit through Canvas, you must submit a paper version of the assignment that includes an explanation of why online submission was not possible. If you cannot attend class, you may deliver paper submissions to the Humanities Department office in Cullimore Hall. *Emailed work is not an acceptable substitute.*

Late Submissions

All assignments are due at 9 AM on the assigned date unless otherwise stated. This rule is not flexible. I encourage you to complete and submit the assignment the night before to avoid encountering any problems with this deadline.

Late journal entries are not accepted. All other late assignments will be docked 15% per class meeting. If the assignment is more than three class meetings late, it will not be accepted.

No work whatsoever will be accepted after December 10th, 2021 at 5 PM.

Technology

You are required to bring a device with you to class that will allow you to access Canvas. This likely means a tablet, laptop or smart phone. There is no makeup credit if you do not bring such a device and are unable as a result to complete course activities that day.

Miscellaneous

All assignments should be completed individually unless permission granted by instructor ahead of time.

No grade changes will be made without a scheduled, in-person meeting. You can ask questions about your grade in any context you would like, but you need to also schedule an in-person meeting with me if you believe a grade deserves re-evaluation.

This syllabus is subject to change throughout the semester. All efforts will be made to adhere to the main deadlines listed here, but topics covered and readings assigned may change to meet the needs and interests of the class.

I do not read comments made on Canvas assignments after the assignment has been graded. If you have follow-up comments after reviewing your grade, please contact me through the regular channels.

Please ask questions as frequently as possible, both in the classroom, outside of it, and online. Attend office hours or make an appointment. There is no reason for you not to understand assignments or expectations, so please take an active role in obtaining the knowledge you want or need.

Assignment Descriptions

12 Journal Entries

Journal entries are short pieces of free writing that allow you to communicate directly with me. They should be 150 – 200 words long. I will not grade on spelling or grammar at all, unless it is so poor that I can't understand what you're saying.

The purpose of the journal entries is:

1) to give me a better idea of who you are and what you care about

2) to help me understand how well you're understanding the course content

3) to verify for me that you are keeping up with the course so far

4) to let me know what questions you have

Questions should be answerable and pertinent; that means they must be at least loosely related to the course topic you are writing about in the rest of the journal entry. (This also means they should not be general questions about the course itself.) They may not be rhetorical, hypothetical, or an inquiry about me or my thoughts. With the remaining space, you may also write about your opinions, ideas, and feelings about anything at all in this class, or you may add additional summaries and/or questions. Beyond these basic requirements, you won't be graded on the quality of the entry. However, the better your journal entries, the more I can improve the class.

You need to write a total of 12 journal entries. You can submit one entry per class meeting up until November 18. You do not have to submit the journal entry on any particular day, but journal entries must be current; specifically, they must address course content or current events that have transpired since your previous journal entry. (So, if you have written an entry about a reading that was due on November 12th, you can turn in that journal entry for the November 12th class, for the November 14th class, or for any other class up until you've turned in a journal entry about a reading due *after* November 12th.)

No extra credit will be given for additional entries beyond 12. Please note that these assignments don't appear on the schedule because it is up to you when you wish to submit them.

The first Canvas introduction is required for everyone and counts as one of your journal entries. Like all journal entries, it will not be accepted late.

Final Paper

In this five-to-seven-page paper, you will analyze an object (assigned by the instructor) as a technological object. You will discuss what factors influenced its design, who used or uses this object, what it means to its users, how it could have been designed differently, what limits it imposes on its users and the larger social setting, and how you would improve its design and function. Papers will be in 12-point Times New Roman, double-spaced. Papers must use APA style, including for works cited. All references used must be cited.

1st Draft

Your paper will be graded in three stages. First, you will produce a rough draft and submit it to the instructor. This first draft will be graded entirely on how complete it is. It should introduce the object, provide context, analyze the object, and offer discussion and conclusions. It must include at least 4 scholarly sources. It will not be graded on writing quality, grammar or spelling (so long as it is coherent), or quality of your analysis.

Provide Feedback to Your Partner

You and an assigned partner will exchange first drafts. Your writing is best improved through feedback from as many other readers as possible. To meet the requirements of this particular assignment, you will read your partner's first draft and provide feedback to them and to the instructor in writing. Your feedback should be

substantive; that is, it should not focus on grammar, spelling, or superficial aspects of the writing (such as "nice font" or "good use of the adjective 'quickly'").

For full credit you must, your response must include:

- A summary of their paper.

- One *substantive* thing that is well done.

- Two *substantive* things that could be improved.

In order to further improve the quality of your finished draft, you and your partner may wish to provide additional substantive feedback or line editing (grammatical, spelling, and word choice advice) to one another. This is strongly encouraged. You can include such work in the feedback you submit to the instructor, but it is not required.

Final Draft

The final draft of your paper is due by our last class meeting. Your final draft will be graded on how well you've integrated course content into your paper (25%), how thoroughly you've analyzed your object of analysis (40%), how clearly you've conveyed your ideas in writing (20%), and how clearly your conclusions and discussion follow from the rest of your work (15%).

Extra Credit

There are two rolling extra credit assignments. That means you may submit one of these extra credit assignments at any time (within the guidelines below).

Extra Credit 1:

For any lecture, you may present a 5 – 15 minute summary of the reading to your classmates at the beginning of the class the reading was assigned for. (On days with two or more readings, you may select just one to summarize.)

Within 1 week after the class where you presented, I will rate your summary simply as "Unacceptable", "Acceptable", or "Very Good or Above". If it is unacceptable, no harm no foul, you just won't get any points. You will earn ¼ point added to your final grade if your summary is "Acceptable" and ½ point if it is "Very Good or Above".

It *may* be possible for you to submit your summary via video, however you would need to begin preparing much earlier for this option. I you would like to submit a video summary, please email me first to discuss it.

Limit: 3 per semester (and 1 per class)

Extra Credit 2:

For each reading, you may submit a detailed write-up that includes the following:

- What technology/ies is this person writing about?

- What technological affordances are important in this reading?

- What question(s) did they ask about that technology?

- Rewrite that question to be about your assigned technology and begin answering that question in about 300 words. If you can't answer the question, tell me a little bit about what you would need and what your next steps would be to answer that question.

Write-ups are due no more than 1 week after the class when the reading was due. As the semester progresses, my grading on these assignments will become increasingly stringent, because you will be learning more about how to address each of these points.

There should be *no* overlap between this write-up and any of your journal entries or other writing assignments. If you already have an assignment that includes some of this information, you should not complete an extra credit write-up for the same reading.

I will determine whether your write up is acceptable based on your thoughtfulness and attention to detail. For each accepted write-up, you will earn 1 additional point on your final grade.

Limit: 5 per semester (and 2 per week)

Grading (& Rubrics)

Participation – 25%

Active participation in this course will enhance the quality and enjoyability of the course for both you and others. In-class discussion is the best tool you have for doing so. 80% of your participation grade will be based on the instructor's assessment of your level of engagement with the course. Assessing participation is a largely qualitative process. The main factors that will be considered in assessing your level of participation are:

- Asking questions in class

- Responding in class to course content

- Responding in class to discussion

- Summarizing the assigned reading out loud at the beginning of class and sharing your reaction to it

- Participating appropriately in class activities (including active listening during lectures and collaborating on the task at hand with your group)

- Limited credit may be given for

    o Attending office hours

    o Helping classmates

    o Demonstrating attentiveness in class

    o Contributing to the class glossary on Canvas

    o Presenting your final paper to the entire class (as a finished draft or as a work in progress)

The remaining 20% of your participation grade will be a quantitative grade calculated based on your review questions. At the end of most classes, you will be given the opportunity to ask and answer three questions about the content of the day's lecture, discussion, or activity. This will be graded solely on:

- Submitting all of the required question-answers. (You will not be penalized for questions missed due to an excused absence.)
- How relevant your question-answers are to the day's content.
- Correctly answering your questions.

Journal Entries (12) – 25%

Each journal entry will be graded on the following criteria:

- Is it coherent?
- Did you include a summary of at least one thing?
- Did you ask at least one question?
- Is it at least 150 and no more than 200 words long?

Your score on each journal entry will range from 0 – 4 reflecting whether you've satisfied each of these criteria.

Final Paper – 35%

1st Draft – 28.6%

Feedback – 28.6%

Final Draft – 42.8%

Quizzes (7) – 15%

The lowest quiz grade will be dropped.

(Please note that the number of quizzes in this course frequently changes during the semester, so don't count on having exactly 7 quiz grades.)

A	90 - 100
B+	88 – 89.$\overline{9}$
B	80 – 87.$\overline{9}$
C+	78 – 79.$\overline{9}$
C	70 – 77.$\overline{9}$
D	60 – 69.$\overline{9}$
F	0 – 59.$\overline{9}$

Readings and Schedule

Date	Topic	Reading
9/1	Intro/Welcome/Syllabus	
9/7	Disagreement and "The Truth"	There Is No Anti-Scientism Movement, and It's a Shame Too, by Taylor Dotson
9/9	What is Science?	Chapter 1, *An Introduction to Science and Technology Studies*, by Sergio Sismondo
9/14	What is Technology?	"Do Artifacts Have Politics?" by Langdon Winner and Artifacts Have Politics. Now What? by Amy Bruckman
9/16	The History of Science	Chapter 2, Sismondo
9/21	Natural Disaster and Civilization	Chapter 3, *A Short History of Progress*, by Ronald Wright
9/23	Marginalized Groups in STS: Stratification and Discrimination 1	Racism in Science is Real, by Lala Tanmoy Das Dismantling Systemic Racism in Science, by Esther A. Odekunle
9/28	Marginalized Groups in STS: Stratification and Discrimination 2	Chapter 4, Sismondo
9/30	Invisible Technology	The Complicated Politics of… Refrigerators, by Matthew Willis and Less Work for Mother? by Ruth Schwarz Cowan
10/5	Health, Healthcare, and Medicalization	The Limits of Machine-Centered Medicine, by Taylor Dotson and Coney Island's Incubator Babies, by Rebecca Rego Barry
10/7	Computing History & Ethics	Chapter 14, *Computer Ethics: A Case-Based Approach*, by Robert Barger
10/12	Ableism and the Built Environment	Ableism 101: Systemic Ableism and Our Neurodiverse World, by Steve Silberman
10/14	Is the COVID-19 vaccine an inherently authoritarian technology?	No new reading; review Winner
10/19	Fat Acceptance	"What is 'Health at Every Size?'", by Deb Burgard
10/21	Technological Affordances	
10/26	Other Alternative Viewpoints on Health	Medical History Podcast (episodes to be assigned in class)
10/28	Genetics	"Culturing Chromosomes, or What's in the Soup?", by Rayna Rapp
11/2	Marginalized Groups in Science: Feminist STS and Standpoint Theory	"Standpoint Theories: Productively Controversial", by Sandra Harding
11/4	Marginalized Groups in Science: Post-Colonial STS	Science for the West, Myth for the Rest? by Colin Scott (from *The Post-Colonial Science and Technology Studies Reader*)
11/9	Work	"Women are just better at this stuff": is emotional labor feminism's next frontier?, by Rose Hackman

11/11	Designing for Humans Case Study: The Flint, Michigan Water Crisis	Washington Post Article and NPR Summary
11/16	Flint Water Crisis, cont.	
11/18	Newark's Water Crisis?	Still Not Safe to Drink? by Today, Explained and How Did We Get Here? A Look Back at Newark's Water Crisis, by Karen Yi
11/23	Sustainability	"The Troubling Evolution of Corporate Greenwashing", by Bruce Watson in *The Guardian* 8/20/16
11/25	**THANKSGIVING BREAK**	
11/30	Food & Nutrition	What is the Mediterranean Diet?: Marketing Science and Regional Taste, by Xaq Frohlich
12/2	Agriculture	TBD
12/7	TBD	TBD
12/9	TBD	TBD