

COURSE DESCRIPTION:

This is a problem-centered and task-oriented course that integrates social science theory and practice into the dominant issues facing a technologically based society. Students learn critical thinking through discussion and hands-on assignments. The course emphasizes student understanding of social institutions that directly affect technological development and professional careers. This course satisfies the three credit 200 level GER in History and Humanities requirement OR the three credit 200 level GER in Social Science requirement.

There are no prerequisites for the course.

COURSE OBJECTIVES

By the end of the course, students will be able to achieve the following objectives:

1. Analyze the complex, interdependent social, political, economic, and technological forces shaping the modern world and its inhabitants.
2. Evaluate the relationships between the creation and use of technologies, the human and natural environments, and the development of social and cultural institutions.
3. Create, articulate, and defend cohesive, well-organized arguments based on evidence in course materials and other credible resources.
4. Generate and construct possible private and public responses to current technological developments to shape the society of tomorrow.

PRIMARY READING MATERIALS*:

Johnson, D. G. & Wetmore, J. M. (2021). *Technology and Society: Building our Sociotechnical Future* (2nd ed.). Cambridge, MA: MIT Press, Inc.

** All assigned readings will be available on Canvas. Students do not need to purchase texts.*

RECOMMENDED MATERIALS:

Anderson, C. (2017). *TED Talks: The Official TED Guide to Public Speaking*. New York, NY: Mariner Books.

Publication Manual of the American Psychological Association (7th ed.). (2020). Washington, D.C.: American Psychological Association.

OPTIONAL TECHNOLOGY*:

AI Content Generator (such as ChatGPT, Co-Pilot, Gemini, Grammarly, Jasper, etc.)

AI Image Generator (such as Canva, DALL·E3, Midjourney, Stable Diffusion, etc.)

** These tools are optional. They may be utilized to complete parts of the final project.*

ADDITIONAL MATERIALS, ANNOUNCEMENTS, & STUDENT GRADES:

Additional items, such as assignments, case studies, online discussions, and supplemental articles and instructions, will be made available through a course website on Canvas. Access these items by logging in to <https://canvas.njit.edu> using your NJIT User ID and password. Be sure to check the Canvas website regularly to stay current on course information and assignments

COURSE ASSIGNMENTS:

Students should complete the readings by the date assigned and be prepared to discuss them in a variety of formats. Textbook(s) and other materials should be brought to class the day they are due (in either print or electronic format). Lectures are designed to supplement, *not replace*, class readings. To measure the degree to which a student has mastered the course material, the following assessment tools will be employed throughout the semester. These assignments must be completed as directed.

- **Class Participation** (20 pts) – Come to class prepared to actively question and comment on the assigned readings. This involves formulating discussion questions prior to class, engaging in conversations, and participating in class activities. **Homework assignments count towards Class Participation points.** ***NOTE:** No make-up assignments will be given for missed in-class activities; individual homework assignments and group discussions will not be accepted after their due dates.*
- **In-Class Quizzes** (20 pts) – Display an understanding of the basic terminology, concepts and models presented in class. There will be multiple “Exit Slips” given as quizzes throughout the semester. Quiz format will include multiple choice, T/F, short answer, and/or essay. ***NOTE:** No make-up assignments will be given for missed quizzes.* **DUE DATES VARY**
- **On-line Discussion** (20 pts) – Complete four (4) on-line discussions. Students will provide an original response (between 250 and 300 words) to a posted question and a constructive comment (between 50 and 100 words) to the responses of at least three (3) classmates. Questions for discussion will be posted on Canvas and students will have approximately one week to participate in the discussion. ***NOTE:** No extensions or make-up assignments will be given for missed on-line discussions.* **DUE Sep. 25, Oct. 16, Nov. 20, & Dec. 4, 2024**
- **Futurecast Project** (35 pts) – Conduct a ‘futurecast’ by considering possible technological futures. Begin by conducting research on demographic, economic, political, and technological trends in a chosen sector (e.g., criminal justice, education, energy, health care, manufacturing, transportation). Interview a key stakeholder (a producer, a consumer, a policy maker, etc.) to gather additional insights. Brainstorm two to three possible future scenarios based on your research. Choose the scenario that you believe has the highest likelihood of coming true; generate an image depicting this scenario and explain the result. Tell how public and private entities might respond. Write a 6 – 8 page paper in APA format and submit to Canvas. ***NOTE:** There are multiple parts to this assignment; each part is due on a different day throughout the semester. See below for a description of each part.*

Topic Proposal (not graded):	DUE Mon. Oct. 7, 2024
Annotated Bibliography* (5 pts):	DUE Wed. Oct. 23, 2024
Interview Protocol* (5 pts):	DUE Wed. Oct. 30, 2024
Futurecast Scenarios* (5 pts):	DUE Wed. Nov. 6, 2024
Futurecast Image* (5 pts):	DUE Wed. Nov. 13, 2024
Futurecast Report (15 pts):	DUE Mon. Dec. 9, 2024

*(*AI tools may be utilized to complete a portion of this section. The content generated by AI must be identified and cited accordingly. Further details will be provided.)*

The Topic Proposal should be a one paragraph narrative describing the technology and the sector that you are interested in researching, and why this issue is important to study.

The Annotated Bibliography should include at least 4–6 citations to prominent technology magazines (such as *CNET*, *Fast Company*, *IEEE Spectrum*, *MIT Tech Review*, *The Verge*, *WIRED*) or scholarly books, articles, and documents that will be used in your project. Each full citation must be followed by a brief *descriptive AND evaluative paragraph* (about 150 words each). The purpose of the annotation is to present the main ideas of the document while critiquing the relevance of those ideas to your paper. See the following link for information on how to prepare an Annotated Bibliography: <http://olinuris.library.cornell.edu/ref/research/skill28.htm>

The Interview Protocol is your guide for the interview. It should include an opening statement (what you will say at the beginning of the interview to introduce yourself), an opportunity for participant consent, your interview questions, and an ending statement (what to say when you end the interview). *You may use an AI tool to generate the INITIAL interview protocol. However, the protocol should then be refined to better fit your scenario and better align with research methodology. Any content generated by AI must be identified and cited accordingly.*

The Futurecast Scenarios should be 200 to 300 word descriptions of the two to three future scenarios that you identified. *You may use an AI tool to generate the INITIAL scenarios. However, the scenarios should then be refined to more closely fit with class discussions and resources. Any content generated by AI must be identified and cited accordingly.*

The Futurecast Image should be a visual representation of the future scenario that you feel has the highest likelihood of occurring. This image can be hand-drawn or painted, can be a personally created mixed-media display, or can be a computer-generated image. *You may use an AI tool to generate the image. However, any content generated by AI must be identified and cited accordingly.*

The Futurecast Report should include a description of your chosen topic and sector, a summary of your market analysis (remember a market analysis should NOT simply describe what each article or study reported; rather, the analysis should carefully and logically weave together a story of important results from similar articles that

encompass your specific topic), a review of your interview, an explanation of the future scenarios, and a visual image of the future. Students are expected to incorporate a minimum of 8-10 books, articles, and documents into their report. All information pulled from the articles into the Futurecast Report (*this means every piece of information, every definition of a theory, every description of findings, etc.*) MUST be cited in APA format. The final Futurecast Report should be 6 – 8 pages in length and **the writing MUST be the student's own voice.**

- **Futurecast Presentation (5 pts)** – Give a presentation to the class that is a brief summary (4-6 minutes) of your project. You are encouraged to use visuals. If you choose to use slides, you should prepare no more than 4-6 slides (the rule of thumb is one slide per minute of speaking). **These slides must be posted to Canvas by 11:30pm the night before your scheduled presentation.** *You may use an AI tool to generate the presentation. However, any content generated by AI must be identified and cited accordingly.* **DUE Mon. Dec. 2 or 4, 2024**

COURSE GRADING:

The following standard letter grades may be assigned: A, A-, B+, B, B-, C+, C, C-, D, and F. An F is given for failing work, to a student who has stopped attending class without formally withdrawing, OR to a student who has continued to attend class but has not submitted all of his or her assignments. Letter grades are assigned based on the total number of points a student accumulates in the class. Grade ranges and midpoints are as follows:

A	90 – 100 (95)	C	70 – 76 (73)
B+	87 – 89 (88)	D	60 – 69 (65)
B	80 – 86 (83)	F	59 & below
C+	77 – 79 (77)		

Assignment weights:

Class Participation	20 pts
In Class Quizzes	20 pts
Online Discussions	20 pts
Futurecast Report	35 pts
Futurecast Presentation	5 pts
TOTAL	100 pts

COURSE POLICIES:

Attendance:

All class members share responsibility for the level of learning and engagement that occurs in the class. **Therefore, students are expected to attend ALL class meetings.** *Material will be covered in class that may not be available in the course readings, handouts, or lecture slides – particularly instructions related to your assignments.* Additionally, class time may be devoted to discussions and other activities that require a face-to-face presence. Repeated unexcused absences will severely affect the final grade that you earn in this class. Just as you would “call out” of work, if you expect to miss a class, please notify the professor via Canvas or direct email.

In addition, students should arrive to and leave class on time (entering late or leaving early is very disruptive to others). Failure to arrive on time may result in an absence for that class period.

Classroom Conduct & Communication

The students and the instructor are expected to exhibit behaviors in the classroom that are **RESPECTFUL, RELEVANT, AND RESPONSIBLE**. As such, all mobile phones should be silenced prior to the start of class and other devices should only be used for course-related activities. In addition, please avoid using negatively-charged language, making side comments, and having private conversations. The intention is to establish a classroom environment in which all students are attentive to others and comfortable sharing different ideas.

Email is the best way to communicate with the instructor. Emails should be written as a professional correspondence, rather than a casual exchange, and include the course number and the reason for writing in the subject line (Subject: STS201_07 - Will miss class 10/18).

Written Work

All written work done in this class is required to follow the REPORT format of APA (American Psychological Association) Style Manual. *This format includes one inch margins, 12 pt. Times New Roman font, double spaced lines, running headers, in-text citations, a separate title page (that includes the title of the paper, your name, the name of this class, the name of your professor, and the date of the assignment) and a separate reference page.* **Papers that do not adhere to APA format will be returned ungraded.** APA details can be found at the Purdue Online Writing Lab <https://owl.english.purdue.edu/owl/resource/560/1/>

Students are expected to proofread their work for clarity and cohesiveness of ideas and for grammatical and typographical errors. Grammar resources can also be found at Purdue Online Writing Lab <https://owl.english.purdue.edu/owl/section/1/5/>. The NJIT Writing Center (<https://www.njit.edu/writingcenter>) is also available to assist students with various aspects of writing, including generating ideas, working through drafts, and refining a final product.

Late Work:

Since much of the work will be turned in via Canvas, items will be time stamped. So, if an assignment is due at 11:30pm and it is uploaded at 11:31pm ... your assignment is late. There is a minimum of a 10% penalty for all work turned in late. Students will have 14 days to complete an assignment. If work is not made up within 14 days of the original due date, the student will receive 0 points. **No work will be accepted after 14 days of the assignment deadline.**

Use of AI

The usage of artificial intelligence (AI) is permitted in this course. If and when students use artificial intelligence in this course to generate, summarize, or analyze material, the output must be identified as AI generated and the **AI tool/application must be cited** as is shown within the NJIT Library AI citation page for AI that can be found at <https://researchguides.njit.edu/AI/home>

UNIVERSITY POLICIES

University policies can be found on the website of the Office of the Dean of Students <https://www.njit.edu/dos/policies/index.php>. Students should take time to specifically review the Academic Integrity Policy, the Code of Student Conduct, and the Title IX Sexual Harassment Policy.

NJIT Statement 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 my 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”

NJIT Student Accommodations

The Office of Accessibility Resources and Services works in partnership with administrators, faculty and staff to provide reasonable accommodations and support services for students with disabilities who have provided our office with medical documentation to receive services. Students needing an accommodation due to a disability should contact the Office of Accessibility Resources and Services at oars@njit.edu. or visit their office in Kupfrian Hall room 201.

COURSE SCHEDULE

WEEK	DATE	ACTIVITY
1	Sep. 4	Topic: Welcome & Introduction Reading: none Activity: Review of syllabus Homework: Review and sign “Syllabus Acknowledgment” form
UNIT 1: INTRODUCTION TO TECHNOLOGY & SOCIETY		
2	Sep. 9	Topic: Historical perspective on technology Reading: <i>Technopoly</i> by Neil Postman, chap. 1-4 Activity: Begin creating a timeline displaying the major technological advancements and their societal impacts. Homework: Continue work on timeline
	Sep. 11	Topic: Historical perspective on technology (cont.) Reading: <i>Technopoly</i> by Neil Postman, chap. 1-4 Activity: Working with a partner, blend individual timelines into one combined visual timeline. Share timeline with class. Homework: Choose one technological advancement from timeline and write a short reflection paper on how it changed human thinking, processes, or connections.
3	Sep. 16	Topic: Current perspective on technology Reading: <i>The Shallows</i> by Nicholas Carr, chap. 1-3 Activity: In small groups, discuss the impact of the internet and social media on general human cognitive processes. Assignment DUE: Complete Quiz 1
	Sep. 18	Topic: Current perspective on technology (cont.) Reading: <i>The Shallows</i> by Nicholas Carr, chap. 1-3 Activity: As a class, discuss the impact of the internet and social media on specific human cognitive processes and activities. Homework: Write a short reflection paper on how the internet has influenced your own thinking and behavior.
4	Sep. 23	Topic: Future perspective on technology Reading: <i>Technology & Society</i> by Johnson & Wetmore, chap. 4 Activity: In small groups, reflect on the six possible impacts on technology listed on p. 65. Did the technologies move forward as expected? Explain. Homework: Respond to Online Discussion 1 prompt
	Sep. 25	Topic: Future perspective on technology (cont.) Reading: <i>Technology & Society</i> by Johnson & Wetmore, chap. 5 Activity: As a class, discuss the cautions and concerns outlined in the chapter. Do we agree? Are there other matters to consider? Assignment DUE: Online Discussion 1 – valuing technology developments

UNIT 2: THE INTERSECTION OF TECHNOLOGY & SOCIETY		
5	Sep. 30	Topic: The social aspect of technological developments Reading: <i>Technology & Society</i> by Johnson & Wetmore, chap. 19 Activity: In pairs, research best practices for gathering the input of critical stakeholders when creating new products or policies. Assignment DUE: Complete Quiz 2
	Oct. 2	Topic: The social aspect of technological developments (cont.) Reading: <i>Technology & Society</i> by Johnson & Wetmore, chap. 15 Activity: In small groups, explore what other technologies have been developed without input from or consideration for all stakeholders / users. Homework: Write Topic Proposal
6	Oct. 7	Topic: The unpredictability of some technology Reading: <i>Technology & Society</i> by Johnson & Wetmore, chap. 23 Activity: As a class, compile a list of the pros & cons of driverless vehicles. How should society begin to address these concerns? Assignment DUE: Topic Proposal
	Oct. 9	Topic: The unpredictability of some technology (cont.) Reading: <i>Technology & Society</i> by Johnson & Wetmore, chap. 20 Activity: As a class, answer the question “Are the industrial sectors built on technology too big to fail?” Homework: Review tutorials on “Getting Started with Library Research” at https://researchguides.njit.edu/tutorials
7	Oct. 14	NO CLASS: Research Day Homework: Respond to Online Discussion 2 prompt
	Oct. 16	Topic: Writing an Annotated Bibliography Reading: ---- Activity: As a class, review materials collected during research process. Discuss how to assess whether materials are relevant, valid, and credible. Assignment DUE: Online Discussion 2 – considering all alternatives
UNIT 3: THE CHALLENGES OF TECHNOLOGY & SOCIETY		
8	Oct. 21	Topic: Technology and Education Reading: Selected articles (provided by the instructor) Activity: In teams, debate the influence technology has had on student engagement, learning, and skill-building. Homework: Prepare Annotated Bibliography
	Oct. 23	Topic: Technology and Education (cont.) Reading: Selected articles (provided by the instructor) Activity: Guest speaker Assignment DUE: Annotated Bibliography
9	Oct. 28	Topic: Technology and the Economy Reading: <i>The Second Machine Age</i> by Brynjolfsson & McAfee, chap. 1-3 Activity: As a class, practice crafting interview protocols Homework: Construct Interview Protocol

	Oct. 30	Topic: Technology and the Economy (cont.) Reading: <i>The Second Machine Age</i> by Brynjolfsson & McAfee, chap. 1-3 Activity: In teams, debate the economic benefits and drawbacks of automation Assignment DUE: Interview Protocol
10	Nov. 4	Topic: Technology and our Health Reading: Selected articles (provided by the instructor) Activity: In small groups, research a technological innovation in healthcare. Homework: Generate Futurecast Scenarios
	Nov. 6	Topic: Technology and our Health (cont.) Reading: Selected articles (provided by the instructor) Activity: In small groups, present a technological innovation in healthcare Assignment DUE: Futurecast Scenarios
11	Nov. 11	Topic: Technology and the Environment Reading: Selected articles (provided by the instructor) Activity: In pairs, create an infographic displaying technology's role in addressing environmental challenges. Homework: Create Futurecast Image
	Nov. 13	Topic: Technology and the Environment (cont.) Reading: Selected articles (provided by the instructor) Activity: Guest speaker Assignment DUE: Futurecast Image
12	Nov. 18	Topic: Technology and Privacy Reading: Selected articles (provided by the instructor) Activity: Choose 2-3 favorite tools / applications. Find and read the privacy policies. Report on what was discovered. Homework: Respond to Online Discussion 3 prompt
	Nov. 20	Topic: Technology and Privacy (cont.) Reading: Selected articles (provided by the instructor) Activity: Guest speaker Assignment DUE: Complete Online Discussion 3 – protecting data privacy
13	Nov. 25	Topic: Technology and Ethics Reading: <i>Weapons of Math Destruction</i> by O'Neil, chap. 3-4 Activity: As a class, role play various ethical dilemmas. Assignment DUE: Complete Quiz 3
	Nov. 27	NO CLASS: Friday classes meet
UNIT 4: THE RESPONSES TO TECHNOLOGY & SOCIETY		
14	Dec. 2	Assignment DUE: Presentation Homework: Respond to Online Discussion 4 prompt

	Dec. 4	Assignment DUE: Presentation Assignment DUE: Online Discussion 4 – factoring ethics into design
15	Dec. 9	Assignment DUE: Futurecast Project
There will be no FINAL EXAM in this class		

**APPENDIX A
STUDENT ACKNOWLEDGEMENT
OF SYLLABUS TERMS & INSTRUCTIONS**

My signature below is evidence that I have read and processed the information detailed in the Course Objectives, Course Assignments, Course Policies, and Course Schedule sections of the syllabus for UNDERSTANDING TECHNOLOGICAL SOCIETY (STS201_07).

I understand that if I do not follow the instructions contained in the syllabus, I will not be able to successfully complete this course.

Student Name (printed)

Student Signature

Date

An additional key to success in this course is asking questions ... early and often ... about the material being covered, the assignments required, and the academic writing process. As we begin, what questions do you have about what you read in the syllabus or about this course in general?
