STS 201-17: Understanding Technological Society

Professor: Dr. Kathleen Pullum

Meeting Time: Wednesday/Friday, 8:30-9:50 a.m.

Meeting Place: Kupfrian Hall, room 104

Office Hours: by.appointment

Contact: kathleen.a.pullum@njit.edu [** messaging through Canvas is preferred **]

==========

Course Description:

What are the social sciences? How do we study them? What kinds of questions do social scientists ask, and what kinds of answers do they seek? The study of institutions, centuries-long patterns of behavior, or perception of interest, for example, are difficult, if not impossible to study in laboratory environments. Still, the various social science disciplines all have something to say about scientific practices, and offer critical perspectives that allow us to view our rapidly changing technological society in a new light.

This class will introduce you to the social sciences and how they allow us to examine some of the biggest debates and controversies related to science and technology in contemporary culture. The aim here is not to cultivate a deep understanding of all of the various social science disciplines, but rather to examine how social scientists develop, ask, and answer questions - how they think and what methods they employ. We will examine the social, political, economic, environmental, and other aspects of technological society through readings, case studies, discussion and writing. Examples of questions this class will explore include: How do we understand "science"? What counts as legitimate science, and what are its practices and norms? How do scientists establish credibility? How are science and technology shaped by social context? Does technology determine the future? How does technology shape the people who use and are exposed to it? To what degree is technological development an unmitigated positive?

Course Objectives:

- To introduce the basic subject areas of the social sciences and their relationship to technology, society, and technological society
- To acquaint students with academic writing in the social sciences
- To analyze, evaluate, and critique aspects of technological society in relation to our position as individuals and as members of the broader scientific and global community
- To develop the skills to articulate critical understanding of the subject matter through in-class discussions and written responses

Required Text:

There are no required texts to purchase for this course. All assigned readings and video links will be posted on Canvas.

Grade Breakdown:

Midterm Exam (30%) There will be two written midterm examination given in class in Weeks 5 and 10.

Reading Responses (20%) These will be written in class and will require you to write a 1-2 page (~500 word) response to a topic covered in the readings.

Final Exam (20%) This is a cumulative exam that will be written in class in the last week of the semester.

Assignments (10%) These include Discussion Boards and Text Annotations.

Participation (20%) Credit for this portion of the grade is assigned according to the amount that you contribute constructively in some way to the discussion in class, either by asking a question, answering a question, or participating in relevant discussion with your classmates. Significant absences and/or tardies will result in a lower participation grade.

Grading Scale:

A (94% and above) **A-** (90 to 93%)
B+ (87%-89%) **B** (83%-86%) **B-** (80 to 82%)
C+ (77%-79%) **C** (73%-76%) **C-** (70%-72%)
D+ (67 to 69%) **D** (60 to 66%)
F (60% and below)

Late Work:

Assignments should be submitted on time, no exceptions.

Midterm and Final Exams will not be re-scheduled or accepted late.

Other late work will receive an automatic -15 points in the first week; -30 points in the second week, and so on. After 3 weeks, late work will no longer be accepted.

Any accommodations for test-taking or extensions on major deadlines must be arranged well in advance. **There will be no make-up opportunities for unexcused absences on examination days.**

Attendance Policy:

Students are expected to attend every class and to be on time. Beyond 2 unexcused absences, participation grades will be reduced by 5% per absence. More than 20 minutes late in class counts as absent. Students are not permitted to enter class after this point.

Transport issues do not count as excused absences or tardies. If you find that you are consistently having trouble getting to class on time, it is your responsibility to work this out. It is extremely disruptive to the teacher and students in the classroom to have individuals entering the classroom once the lecture has started.

Once you have entered the room, you are there for the class. Students should not be going in and out throughout the lecture, or leaving early.

Other Policies:

Mobile electronic devices should not be used in the classroom and should remain in your bag for the entirety of class time. Laptops may be used for note-taking, but if I notice that you are not participating in the class as a result, I will ask you to put them away.

There will be no eating allowed in class, and drinking should be kept to an absolute minimum.

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 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

USE OF AI TOOLS PROHIBITED

You may not use artificial intelligence (AI) or machine learning (ML) tools, such as ChatGPT or Dall-E, on assignments, discussions, exams, and presentations in this course. You are expected to complete each assignment without substantive assistance from others, including AI/MI automated tools.

Accessibility:

NJIT's Office of Accessibility Resources and Services works to provide students with reasonable accommodations for students. If you need reasonable accommodation to complete the course, please see the website for details (https://www.njit.edu/studentsuccess/accessibility) or reach out to the office via email at oars@njit.edu or by phone at 973-596-5417.

CALENDAR:

** Readings and due dates subject to change depending on class progress**

Week 1: **Introduction to STS**

9/4: B. Russell, "The Social Responsibility of Scientists

9/6: T. Dotson, "There Is No Anti-science Movement, and It's a Shame Too"

Week 2: **The Social Construction of Science**

9/11: M. Shapin and S. Schaffer, *Leviathan and the Air Pump*, Ch. 2

9/13: Collins and Pinch, *The Golem*, "Two experiments that 'proved' the theory of relativity"

Week 3: **Doing Words With Things**

9/18: Bruno Latour, "The Berlin Key, or How to Do Words with Things"

9/20: Evelyn Ruppert, "Doing Words With Things on the Internet"

Week 4: **Technology & Politics**

9/25: Langdon Winner, "Do Artifacts Have Politics?"

9/27: Langdon Winner, "*Techne* and *Politeia*"

Week 5: **Objectivity**

10/2 : Collins and Pinch, *The Golem at Large*, "Crash!: nuclear fuel flasks and anti-misting kerosene on trial"

10/4: Midterm 1 (in class)

Week 6: **Feminist Science/Subjectivity**

10/9: Donna Haraway, "Situated Knowledges"

10/11: Rachel Gross, "Feminist Science Is Not An Oxymoron"

Week 7: **Postcolonial Critiques**

10/16: Sandra Harding, "Must the Advance of Science Advance Global Inequality?"

10/18: Rohan Deb Roy, "Science Still Bears the Fingerprints of Colonialism"

Week 8: **Green Knowledge & Sustainability**

10/23: Michael Goldman, "The Birth of a Discipline: Producing Authoritative Green Knowledge, World Bank Style"

10/25: Rebecca Lave, "Introduction" in *Fields and Streams: Stream Restoration, Neoliberalism, and the Future of Environmental Science*

Week 9: **Technology & Psychology**

10/30: Sherry Turkle, *Alone Together*

11/1: Sherry Turkle, *Alone Together*

Week 10: **Imagination & Futurism**

11/6: Midterm 2

11/8: Museum Day

Week 11: **Policy & Privacy**

11/13: Sheila Jasanoff , "The Science Wars and American Politics"

11/15: Shoshana Zuboff, "Surveillance Capitalism"

Week 12: **Ethics**

11/20: Adriana Petryna, "Ethical Variability: Drug development & globalizing clinical trials"

11/22: AI Ethics

Week 13: **Media & Technology**

11/27: Film & Discussion Board (remote assignment)

Week 14: **Presentations**

12/4 & 12/6: Presentations

Week 15: **Exam**

12/12: Class wrap-up