

STS 1504: Intro to Science and Technology Studies

Syllabus

Spring Session 2022

INSTRUCTOR:

Savannah Mandel

PhD candidate, Science and Technology Studies

Office: Lane Hall 322 (Let me know if you need accommodations)

Email: Savannahlann@vt.edu or via Canvas

Office Hours: By appointment

COURSE LOCATION AND TIME:

This course will be taught on Tuesdays and Thursdays from 11:00–12:15 at Major Williams 334.

COURSE DESCRIPTION:

Intro to Science, Technology, and Society offers a glimpse into how humans interact with the rapidly advancing world around us. In this course students will study how science and technology are defined and analyzed by the humanities and social sciences. Students will specifically explore the topics of knowledge, expertise, and technology ethics from multicultural and diverse perspectives. The course will draw on a variety of sources such as literature, fiction, film, documentaries, poetry and art.

INCLUSION STATEMENT AND ACCOMODATIONS:

Students with disabilities are responsible for self-identification and are encouraged to contact Services for Students with Disabilities. If you require any special arrangements or considerations for the class, please contact me immediately to arrange an appointment to discuss accommodations. See <https://www.ssd.vt.edu/>.

All students learn differently. If you are concerned that your learning style is not currently accommodated in the class, please contact me to discuss your individual learning needs.

If the official Virginia Tech roster does not list your preferred name or indicate your preferred pronouns, please let me know as soon as possible so I can adjust my roster accordingly. This course strives to uphold the Virginia Tech Principles of Community. If you are concerned at any point that I or a fellow student have failed to uphold these Principles, please notify me.

COMMUNICATION EXPECTATIONS:

You're welcome to contact me via email or directly through Canvas. I strive to respond to any emails within a 48 hour period.

Just as you hold me accountable for answering emails, I hold you responsible for checking your emails and Canvas announcements regularly and reading them in their entirety. I promise to try to keep the emails to a minimum.

If you have questions regarding assignments or due dates please refer to the syllabus and schedule located on Canvas before reaching out to me. If the syllabus changes I will email you to let you know.

If you find you're struggling with either the course material or assignments please reach out and I will try and assist you (or point you to resources that might help). That being said, do not wait until the last day of class or 5 minutes before an assignment is due to ask for help.

REQUIRED TEXTS:

There are no required texts for this course. All reading materials will be made available in a virtual format whether via PDF or through the library. However, we will be reading several chapters out of a couple of different books. You're welcome to purchase a physical copy if that suits your learning style better.

GRADING POLICIES:

Course Requirements

The course has a total of 200 possible points, distributed as follows:

Reflection Assignment 1	25 points
Reflection Assignment 2	25 points
Reflection Assignment 3	25 points
Reflection Assignment 4	25 points
Mid-Term Project	50 points
Final Project	50 points
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	Total: 200 points

Late Work

Late work is not accepted. If you anticipate extenuating circumstances that may prevent you from completing an assignment, please arrange an alternate deadline or assignment with me in advance. If you have a medical or family emergency, please provide a copy of the appropriate paperwork if applicable and reach out to me when you return.

Make Up Assignment

You can choose to revise and resubmit one reflection assignment if you are dissatisfied with your grade. Any revisions must be submitted by **Friday May 6th at 11:59pm** via Canvas.

Extra Credit

This course has one optional extra credit opportunity with the potential for more throughout the semester. See the extra credit assignment instructions via canvas. The extra credit assignment must be submitted by **Friday May 6th at 11:59pm** via Canvas.

Feedback

I will provide brief written feedback on every graded assignment. That being said, don't hesitate to reach out to me if you would like to schedule a more extensive feedback session or if you are concerned about your progress in the course.

COURSE SCHEDULE:

	Date	Readings/Materials	Notes
Module 1: Knowledge Constructed, Power Gained			
1.1 Introductions	Tuesday, January 18th	<ul style="list-style-type: none"> • Read the syllabus • Explore the Canvas page 	Welcome to the course!
1.2 What is STS?	Thursday, January 20th	<ul style="list-style-type: none"> • Edge, David. 1995. "Chapter 1: Reinventing the Wheel," in the Handbook of Science and Technology Studies. Sage Publications. [Only Pages 1-12] (12p) 	
	Tuesday, January 25th	<ul style="list-style-type: none"> • Law, John. 2017. "STS as Method." In The Handbook of Science and Technology Studies. MIT Press. (19p) 	
	Thursday, January 27th	<ul style="list-style-type: none"> • Sismondo, Sergio. 2008. "Science and Technology Studies and an Engaged Program." In The Handbook of Science and Technology Studies, edited by Hackett, et al. 3rd ed. Cambridge: MIT Press, 13-31. (14p) 	Reflection Assignment 1 is Due Friday January 28th
1.3 How is knowledge	Tuesday, February 1st	<ul style="list-style-type: none"> • Vertesi, Janet. 2008. "Mind the Gap: The London 	

constructed?		Underground Map and Users' Representations of Urban Space." <i>Social Studies of Science</i> , 38(1): 7–33. (21p)	
	Thursday, February 3rd	<ul style="list-style-type: none"> Cruikshank, Julie. 2012. "Are Glaciers 'Good to Think With'?" Recognizing Indigenous Environmental Knowledge." <i>Anthropological Forum</i>, 22 (3): 239–50. (11p) 	[Film Day] We'll be watching the documentary "Angry Inuk"
	Tuesday, February 8th	<ul style="list-style-type: none"> Epstein, Steven. 1995. "The Construction of Lay Expertise: AIDS Activism and the Forging of Credibility in the Reform of Clinical Trials." <i>Science, Technology, & Human Values</i> 20(4): 408–437. (23p) 	
Module 2: Cultures of Science			
2.1 Where is science done?	Thursday, February 10th	<ul style="list-style-type: none"> Latour, Bruno, and Steve Woolgar. 1979. "Chapter 1: From Order to Disorder" in <i>Laboratory Life: The Construction of Scientific Facts</i>. Beverly Hills: Sage. 	
	Tuesday, February 15th	<ul style="list-style-type: none"> Von Oertzen, Christine. "Science in the Cradle: Millicent Shinn and Her Home-Based Network of Baby Observers, 1890–1910." <i>Centaurus</i> 2013, Vol. 55: pp. 175–195. (16p) 	
	Thursday, February 17th	<ul style="list-style-type: none"> "Gotta name them all: how Pokémon can transform 	Reflection Assignment 2 is Due

		<p>taxonomy." <i>Nature</i> 535: 323–324, (2016). (2p)</p> <ul style="list-style-type: none"> • (Watch) Corrupted Blood: World of Warcraft's own pandemic Launcher https://www.youtube.com/watch?v=2hpwHnP-all&t=34s 	Friday February 18th
2.2 Who does science?	Tuesday, February 22nd	<ul style="list-style-type: none"> • Benjamin, Ruha. 2013. "Introduction: To the Moon," in <i>People's Science: bodies and rights on the stem cell frontier</i>. (26p) 	[Film Day] We'll be watching episode 1 of "Unnatural Selection"
	Thursday, February 24th	<ul style="list-style-type: none"> • Wynne, Brian. 1992. "Misunderstood Misunderstanding: Social Identities and Public Uptake of Science." <i>Public Understanding of Science</i> 1, no. 3: 281–304. (21p) 	
	Tuesday, March 1st	<ul style="list-style-type: none"> • Wilson, Elizabeth. 2010. "Chapter 3: Artificial Psychotherapy" in <i>Affect and Artificial intelligence</i>. University of Washington Press. (25p) 	
	Thursday, March 3rd	(No Readings) Come to Class for Mid-Term Project Review Workshop	Mid-Term Project is Due Friday March 4th
Module 3: Technology and Ethics			
3.1 What happens when science and technology meet?	Tuesday, March 15th	<ul style="list-style-type: none"> • (Watch) "The Science Behind Dog Cloning" https://www.youtube.com/watch?v=DmHYUvmiXQI • (Watch) "The Story of Dolly the Cloned Sheep" 	

		https://www.youtube.com/watch?v=tELZEPcgKkE	
Spring Break			
	Thursday, March 17th	<ul style="list-style-type: none"> (Listen) Lives vs The Economy https://www.npr.org/transcripts/835571843 	[Film Day] We will be watching Black Mirror episode "Hated in the Nation"
	Tuesday, March 22nd	<ul style="list-style-type: none"> Martin, Alexander. 2020. "Coronavirus: PC gamers asked to donate GPU time for research." (2p) 	
3.2 How does society influence technology?	Thursday, March 24th	<ul style="list-style-type: none"> Wells-Jensen, Sheri. 2018. "The Case for Disabled Astronauts." <i>Scientific American</i>. (4p) Mandel, Savannah. 2021. "The Death of Outer Space Dreams: hard decisions and a war of utopian demands." <i>The Geek Anthropologist</i>. (4p) 	
	Tuesday, March 29th	<ul style="list-style-type: none"> Winner, Langdon. 1980. "Do Artifacts Have Politics?" <i>Daedalus</i> 109(1): 121-136. (15p) (Watch) How biased are our algorithms? Safiya Umoja Noble TEDxUIUC 	
	Thursday, March 31st	<ul style="list-style-type: none"> Boellstorff, Tom. 2008. "Chapter 5: Personhood" in <i>Coming of Age in Second Life</i>. Princeton University Press. (Explore) The Uncensored Library https://www.uncensored 	Reflection Assignment 3 is Due Friday April 1st

		<p>library.com/en</p> <ul style="list-style-type: none"> (Watch) This Minecraft Map Could Get Me Banned From Several Countries https://www.youtube.com/watch?v=5L6OuOr4jS4 	
	Tuesday, April 5th	<ul style="list-style-type: none"> (Listen) Psychologia The Podcast "Episode 13: The Strange History of the Vibrator" 	
3.3 How does technology influence society?	Thursday, April 7th	<ul style="list-style-type: none"> Wilson, Elizabeth. 2010. "Introduction: The Machine Has No Fear," in <i>Affect and Artificial Intelligence</i>. University of Washington Press. (28p) <p>Or</p> <ul style="list-style-type: none"> Cowan, Ruth Schwartz. 1983. "Chapter 3: The Invention of Housework: The Early Stages of Industrialization" in <i>More Work for Mother. The Ironies of Household Technologies from the Open Hearth to the Microwave</i>. New York: Basic Books. 	
	Tuesday, April 12th	<ul style="list-style-type: none"> "Big data meets Big Brother as China moves to rate its citizens" by Kevin Hong (12p) 	
	Thursday, April 14th	<ul style="list-style-type: none"> (Watch) Ted Talk: Prukalpa Sankar "How Big Data Can Influence Decisions That Actually Matter" 	[Film Day] We'll be watching Black Mirror episode "Nosedive"
	Tuesday, April 19th	<ul style="list-style-type: none"> Daniels, Jesse. 2018. "The Algorithmic Rise of the Alt-Right." Contexts 17 (1): 60-65. (5p) 	[Partial Film Day] We'll be watching the first half of "The Social Dilemma"

Module 4: STS in Action			
4.1 STS in Action	Thursday, April 21st	<ul style="list-style-type: none"> Callon, Michel. 1984. "Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay." Sociological Review 32, 196-233. (29p) 	<p>[Partial Film Day] We'll be watching the second half of "The Social Dilemma"</p> <p>Reflection Assignment 4 is Due Friday April 22nd</p>
	Tuesday, April 26th	<ul style="list-style-type: none"> Zuiderent-Jerak, Teun. 2015 "The Stuff of Interventions: Technologies of Compliance in Hemophilia Care." In Situated Intervention: Sociological Experiments in Health Care. The MIT Press. (15p) 	
	Thursday, April 28th	(No Readings) Come to Class for Final Project Review Workshop	Final Project Review Workshop
	Tuesday, May 3rd	No Class	<p>Final Project is Due Friday May 6th</p> <p>(Optional) Extra Credit Assignment are Due Friday May 6th</p> <p>(Optional) Make-Up Assignments are Due Friday May 6th</p>

HONOR CODE:

We follow the Virginia Tech Honor System in this class. Please make yourself familiar with the Honor System practices and the various definitions of

plagiarism. All assignments submitted should be considered graded work, unless otherwise noted. For more information on the Honor Code, please see <http://www.honorsystem.vt.edu>.