Elective Course Proposal

Technology, Politics, and Society

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I. Title: Technology, Politics, and Society

II. Prerequisites: None

III. Credits type: Non-Law

IV. Cross-Listed: Yes

V. Course vision:

Do technologies shape the world we live in or does the world we live in shape the technologies we use? The answer, of course, is both. But how does this happen? How does politics become embedded in everyday technologies? How do technologies influence the world we build for ourselves? This course is intended to provoke and think through such questions, while introducing students to the social studies of science and technology and the field of Science Technology and Society (STS).

This course is an introductory course designed to engage students in exploring the intricate relationship between sciences, technologies, and society. This course examines the dynamic interplay between scientific advancements and cultural transformations, encouraging students to analyse critically how technology both shapes and is shaped by social, political, and economic forces.

Throughout the semester, students will investigate key concepts in Science, Technology, and Society (STS), exploring theories and methodologies that explain the evolution of technological artifacts and infrastructures. This course will provide an inter- and multi-disciplinary perspective on the theories and principles of STS, in order to enable students to understand the many-layered interactions between science, technologies, and society. We will discuss the construction of scientific knowledge and authority, how the interplay between political power and scientific authority are performed, how culture is influenced by and influences the creation of knowledge and science, and whether social divisions such as gender, race, caste, etc can become embedded in technology, and indeed, science. By

examining historical case studies, current events, and speculative futures, students will learn to identify the risks and opportunities that come with rapid technological change.

The curriculum is structured around class discussions and assignments meant to encourage critical thinking; and bring together theoretical ideas with real life examples. Topics include the social construction of technology, digital culture, cybersecurity, environmental impacts, and ethical dilemmas in technological innovation. Students will engage with both theoretical frameworks and practical examples to develop informed responses and creative strategies for addressing contemporary challenges.

This course not only provides a solid foundation in STS, but also equips students with the analytical skills necessary to assess and respond to the technological challenges of the future.

VI. Learning Outcomes:

- Students will be able to gain an overview of the field of STS – Science Technology and Society (also known as Science and Technology Studies)
- Students will learn to examine and identify some of the important themes, concepts, and approaches in the field of STS.
- Students will learn to use STS as a basis for understanding issues arising from the dynamic and reciprocal relationships between science, technology and society.

VII. Pedagogical Approaches:

- Classes will be discussion-based and interactive.
- Students are expected to have read/watched/listened to/seriously engaged with all the assigned materials before coming to class
- All students will lead at least two discussions based on assigned materials; and are expected to play an active, engaged role in all classroom discussions.

VIII. Lecture Design (13 Weeks):

<u>Week 1:</u> Introduction
Introductions, Class Etiquette, Sign-Ups, etc

To Watch Before Class: *Mr. India* (1987)

Week 2: Imbrications
What is STS? What does society have to do with science? With technology?

Hari Kunzru (1997) You Are Cyborg. *Wired*
Bruno Latour (1991) The Berlin key or how to do words with things.

Week 3: Politics
If we look at science, can we see politics?

Langdon Winner (1986) *Do Artifacts Have Politics?*
Jason Kass (2013) 'Bill Gates Can't Build a Toilet' in *The New York Times*

Recommended:
Isaac Asimov (1955) 'Franchise' in *If: Worlds of Science Fiction*

Week 4: Power
Are there strings that pull us?

Shoshanna Zuboff (2019) 'Home or Exile in the Digital Future' in *The Age of Surveillance Capitalism* pp 10-30
Michel Foucault (1975) 'The Means of Correct Training' in *Discipline and Punish*

Movie: *The Internet's Own Boy* (2014)

Suggested:
Charles Duhigg (2012) 'How Companies Learn Your Secrets' in *The New York Times*

Week 5: Colonies
Whose science/tech is it?

Edward W Said Preface (2003) and Introduction (1977). *Orientalism*
Shiv Viswanathan (1997) 'On the Annals of the Laboratory State' in *A Carnival for Science*

Speech: Bimol Akoijam's maiden speech in Parliament on 1 July 2024
https://www.youtube.com/watch?v=qr3Eyq8WCpI

Suggested:
Donna Haraway (1989) 'Teddy Bear Patriarchy' in *Primate Visions*

Week 6: Publics
What do they know of technology who only technology know?

Harry Collins And Robert Evans (2008) "You cannot be serious! Public understanding of technology with special reference to 'Hawk-Eye'". *Public Understanding of Science*
Brian Wynne (1996) 'Misunderstood Misunderstandings: social identities and public uptake of science' in *Misunderstanding Science* (Edited by Alan Irwin and Brian Wynne)

Movie: *Don't Look Up* (2021)

Week 7: Mid-Sem Week
Doubts, Feedback, Submission of Mid-Sem project/ In-Class Response Paper Writing

Week 8: India

Jawaharlal Nehru (1950). The Spirit of Science (Speech at the Fuel Research Institute, Digwadih.
Archishman Raju (2024). Nehru and the Spirit of Science. *The India Forum*
Pankaj Sekhsaria (2019). Technology Vision 2035: Visions, Technologies, Democracy, and the Citizen in India. *Economic and Political Weekly*

Song: *Chhodo kal ki baatein* From *Hum Hindustani* (1960)

Week 9: **Peripheries – I**
Who writes the story? Who gets left out?

Emily Martin (1991) The Egg and the Sperm: How Science Has Constructed a Romance Based on Stereotypical Male-Female Roles. *Signs* 16(3)
Virginia Eubanks (2017) 'Introduction: Red Flags' in *Automating Inequality: how high-tech tools profile, police, and punish the poor*

Suggested:
Gabrielle Jackson (2019) The female problem: how male bias in medical trials ruined women's health. *The Guardian*

Week 10: Peripheries – II
What about those who won't?

Sally Wyatt (2003) 'Non-users also matter: The construction of users and non-users of the Internet' in N Oudshoorn & T Pinch (eds) *How Users Matter: The Co-construction of Users and Technology*
Ruha Benjamin (2016) Informed Refusal: Toward a Justice-based Bioethics in *Science Technology and Human Values*
Alex Vadukul (2022) 'These "Luddite" Teens Are Abstaining From Social Media' in *The New York Times*

Suggested:
Lloyd Blankenship (1986) The Hacker Manifesto in *Phrack Inc*

Week 11: Networks
Who/what talks to who/what else? Does it even matter?

David Bell (2008) *Cyberculture Theorists: Manuel Castells and Donna Haraway*
- Chapter 4: Castells' Key Ideas
- Chapter 7: Haraway's Key Ideas

Ken Liu (2012) The Perfect Match

Week 12: Expertise
Do we know that they know that we know?

Timothy Mitchell (2002) Can the Mosquito Speak in *Rule of Experts: Egypt, Technopolitics, Modernity*
Sheila Jasanoff (2007) Technologies of Humility in *Nature*

Movie: *Minority Report* (2002)

Suggested:
Vandana Shiva (2016) 'The Hijacking of the Global Food Supply' in *Stolen Harvest. 12-25*

Week 13: Numbers
Lies, damned lies, and statistics

Theodore Porter (1995). 'The Political Philosophy of Quantification' in *Trust in Numbers: Objectivity in Science and Public Life*
Mike Hulme (2020) Fetishising 'The Number'

Video: Carole Cadwalladr: Broligarchs, AI, and a Techno-Authoritarian Surveillance State: *https://www.youtube.com/watch?v=vG7CvbccdVM*

Suggested:
Vidya Subramanian (2021) 'Data Data Everywhere but where's the stuff that matters?' in *MoneyControl.com*

Week 14: Revision

Final assessments, reflections, feedback, goodbyes