

**Dates:** May 2, 2022 – June 13, 2022

**Time:** Monday & Thursday, 9:00am–12:00pm

**Location:** ZOOM

**Instructor:** Dr. Steven Richardson  
**Email:** srichar9@lakeheadu.ca  
**Office Hours:** by appointment (email)

## Description

This course explores contemporary issues in science and technology studies (STS). We will focus and critically reflect on major theoretical developments and trends within the field to help students understand the reciprocal relationship between science, technology and society. Students will gather twice weekly over six weeks on Zoom to discuss weekly readings, make presentations and submit their final essays.

In addition to the central question guiding this course – what is technology? – students will also have the opportunity to pursue specific substantive interests related to other potential themes, such as: technological resistance, scientific controversy, dis/ability, surveillance and privacy, postcolonialities, ethics, gender, sexuality, (in)equality, governance.

## Learning Objectives

In this course, you will gain

- an appreciation of how science and technology shape and are shaped by myriad social forces, and;
- critical and foundational skills to help you succeed in grad/law school and beyond.

## Evaluation

### 1. Seminar participation (knowledge of readings and communication of ideas): 35%

In order to ensure the success of the seminar, students should attend every class and actively contribute to seminar discussions. Students should come prepared to each seminar by reading all of the required texts prior to attending class, and demonstrating this through participating in discussions.

As part of seminar participation, students will be required to prepare **two presentations (15mins each) or one presentation (25mins)** – see Google Sign up sheet – that will lead class discussion around one of the required readings for that lecture/week. These presentations

should be short, offer a summary of the selected reading (or a reading of your own, pending instructor approval), it should be analytical, and strive to open up discussion.

**During class on May 9<sup>th</sup>, students will sign up and/or propose topics and readings for seminar presentations that will take place from Seminar 8 (May 30<sup>th</sup>) onwards.**

Students can also propose their own topic or readings for their seminar presentation, subject to instructor approval. If you choose to do so, then you must send me a full citation (SAGE Harvard style) of the reading of your choice during the sign-up day, May 9<sup>th</sup>.

Sign up sheet:

[https://docs.google.com/document/d/19ggoEEmdhpSEWepypbX8P9kUQyBSRvdqN\\_HWICiRZmM/edit?usp=sharing](https://docs.google.com/document/d/19ggoEEmdhpSEWepypbX8P9kUQyBSRvdqN_HWICiRZmM/edit?usp=sharing)

## **2. Research Proposal (max 1500 words): 20% (due May 16, 2022)**

To help you prepare for the Final Research Paper, you will submit a proposal (20%) for your topic containing three key components: (1) an overview of the science, technology, and/or social context you want to examine, (2) the theory(ies) or methods you intend to use for analysis, and (3) a clear thesis statement. The proposal will be due May 16<sup>th</sup>, 2022 (Seminar 5).

## **3. Final Paper (min 4000 words on a course topic): 45% (due June 13, 2022)**

As part of the course requirements, students are required to submit a research paper (45%). The final paper can focus on either a scientific debate/controversy or on the sociological or social justice significance of a particular technology. Students should choose topics related to the course themes and that are relevant to their current and future research interests. The final paper should be around 4000 to 5000 words in length, not including bibliography and references (roughly 15-20 pages total, double spaced). The final paper is due the day of our last class, June 13<sup>th</sup>, 2022.

## **Reading Expectations**

The reading list below is intended to give students a full overview of the central issues, methodologies and ways of approaching contemporary studies of technology. Seminars 1–5 provide “foundational” readings in STS. The readings for seminars 6–10 provide topics from which students may select for their presentations. Students may also propose their own readings to present, provided they also include one of the listed readings in their presentations. Depending on how we as a class choose to end the course, for the remaining classes, (11–13) have four reading list options that will be reduced to two (or three, depending on time).

## Schedule, Weekly Topics and Readings

May 2, 2022

### **Seminar 1: Technology as...**

(no readings)

May 5, 2022

### **Seminar 2: Two Questions Concerning technology**

Sismondo S (2010) Two questions concerning technology. In: *An Introduction to Science and Technology Studies*. Chichester, UK: Blackwell Publishing Ltd, 96–105

Ihde D (1990) Introduction: entry level. In: *Technology and the Lifeworld: From Garden to Earth*. Bloomington, IN: Indiana University Press, 1–10.

May 9, 2022 \*\*\*\*Sign up day for student presentations

### **Seminar 3: SCOT 1**

Sismondo S (2010) Social construction of realities. In: *An Introduction to Science and Technology Studies*. Chichester, UK: Blackwell Publishing Ltd, 57–71

Rosen P (1993) The social construction of mountain bikes: Technology and postmodernity in the cycle industry. *Social studies of science* 23(3): 479–513.

May 12, 2022

### **Seminar 4: SCOT 2**

Law J (1987) Technology and heterogeneous engineering: The case of Portuguese expansion. In: Hughes TP, Pinch T and Bijker W (eds) *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*. Cambridge: MIT Press, 111–134.

Hacking I (1999) Why ask what? In: *The Social Construction of What?* Cambridge: Harvard University Press, 1–35

May 16, 2022 \*\*\*\* Research proposals due in class

### **Seminar 5: ANT/The Thing Things**

Johnson J (1988) Mixing humans and nonhumans together: The sociology of a door-closer. *Social problems* 35(3): 298–310.

Mol A (2008) I eat an apple. On theorizing subjectivities. *Subjectivity* 22(1): 28–37

Callon M (1986) Some elements of a sociology of translation: Domestication of the scallops and the fishermen of St. Briec Bay. In: Law J (ed) *Power, Action and Belief: A New Sociology of Knowledge*. London: Routledge & Keegan Paul, 196–233.

May 19, 2022

**Seminar 6: Politics**

Winner L (1980) Do artifacts have politics? *Daedalus* 109(1): 121–136.

Joerges B (1999) Do politics have artefacts? *Social Studies of Science* 29(3), 411-431.

Woolgar S and Cooper G (1999) Do artefacts have ambivalence: Moses' bridges, winner's bridges and other urban legends in S&TS. *Social studies of science*: 29(3), 433-449

May 23, 2022

**\*\*VICTORIA DAY NO CLASS\*\***

May 26, 2022 \*\*\*\* *Student presentations begin*

**Seminar 7: Feminist Approaches/Sexuality**

Harding S (1996) 'Science is "Good to Think With"' *Social Text* 46/47: 15–26.

Oudshoorn N (2003) “The first man on the pill”: Disciplining men as reliable test subjects. Ch. 8 in: *The Male Pill: A Biography of Technology in the Making*. Durham: Duke University Press, 171–190

Carpenter LM and Casper MJ (2009) A tale of two technologies. HPV vaccination, male circumcision, and sexual health. *Gender & Society* 23(6): 790–816

May 30, 2022

**Seminar 8: Language, Thought**

Shapin S and Schaffer S (1985) Seeing and believing. In: *Leviathan and the Air-Pump. Hobbes, Boyle, and the Experimental Life*. Princeton: Princeton University Press, 22–79.

Watson-Verran H and Turnbull D (1995) Science and other indigenous knowledge systems. In: Jasanoff S, Markle GE, Petersen JC and Pinch T (eds), *Handbook of science and technology studies* Thousand Oaks CA: Sage, 115–139

Turkle S and Papert S (1990) Epistemological pluralism: Styles and voices within the computer culture. *Signs* 16(1): 128–157.

June 2, 2022

**Seminar 9: Dis/ability / Crip Technoscience 1**

Saltes N (2016) Redrawing the lines of difference: disability, technology and the body. In: *Disability in the Digital Age: Reconfiguring Access, Inclusion and Equality*. [PhD Thesis], Queen’s University, Kingston, Ontario, Canada, 202–227.

Hamraie A (2019) Crip technoscience manifesto. *Catalyst*, 5(1), 1–33.

Schillmeier M (2010) Othering blindness? In: *Rethinking Disability: Bodies, Sense, and Things*. New York: Routledge, 42–100.

June 6, 2022

**Seminar 10: Dis/ability / Crip Technoscience 2**

Richardson S and Abrams T (2020) Assistive spectacles: A vision for the future. *Social Theory & Health*: (20): 37-53

Simakova E (2010) RFID ‘theatre of the proof’: Product launch and technology demonstration as corporate practices. *Social Studies of Science* 40(4): 549–576.

June 9, 2022

**STS Methods and Theories**

Simakova E and Neyland D (2008) Marketing mobile futures: Assembling constituencies and creating compelling stories for an emerging technology. *Marketing Theory* 8(1): 91–116.

TallBear, K (2013) Introduction. In: *Native American DNA. Tribal belonging and the false promise of genetic science*. Minneapolis, MN: University of Minnesota Press, 1–29

Verbeek PP (2005) Introduction: to the things themselves. In: *What Things Do: Philosophical Reflections on Technology, Agency, and Design*. University Park: The Pennsylvania State University Press, 1–14.

June 13, 2022

**Users as Agents of Social/Technological Change**

Oudshoorn N and Pinch T (2005) Introduction: how users and non-users matter. In: Oudshoorn N and Pinch T (eds) *How Users Matter: The Co-Construction of Users and Technologies*. Cambridge: MIT Press, 1–25.

Wajcman J (1991) The built environment: women's place, gendered space. In: *Feminism Confronts Technology*. University Park, PA: Pennsylvania State University Press, 110–136

Kline R and Pinch T (1996) Users as agents of technological change: The social construction of the Automobile in the rural United States. *Technology and Culture* 37(4): 763–795.

## Assignment Policies

- Assignments must be formatted according to SAGE Harvard style (same as reading list below). For more information, see: [https://uk.sagepub.com/sites/default/files/sage\\_harvard\\_reference\\_style\\_0.pdf](https://uk.sagepub.com/sites/default/files/sage_harvard_reference_style_0.pdf)
- There is a penalty for assignments handed in late (2% per day).
- Plagiarism will not be tolerated and will be dealt with according to the University regulations. See for more details, Lakehead University New Student Code of Conduct: Academic Integrity: <https://www.lakeheadu.ca/students/student-life/student-conduct/academic-integrity/node/51239>

## Accommodations

Lakehead University is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. If you think you may need accommodations, you are strongly encouraged to contact [Student Accessibility Services \(SAS\)](#)<sup>1</sup> and register as early as possible.

Accommodations are in accordance with the terms of the [Ontario Human Rights Code](#).<sup>2</sup> This occurs through a collaborative process that acknowledges a collective obligation to develop an accessible learning environment that both meets the needs of students and preserves the essential academic requirements of the course.

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<sup>1</sup> <https://www.lakeheadu.ca/students/student-life/student-services/accessibility>

<sup>2</sup> <http://www.ohrc.on.ca/en/ontario-human-rights-code>