INF 1501: Culture & Technology I (Fall 2017) - Syllabus

Instructors:

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Class times and location: Monday, BL 507, 6:30-9:30pm

Office hours: By appointment

1. Statement of Acknowledgement of Traditional Land

For thousands of years, the land on which the University of Toronto operates has been the traditional home of the Huron-Wendat, the Seneca, and the Mississaugas of the Credit River. Today, this meeting place is still home to many Indigenous people, and we are grateful to have the opportunity to work here.

2. Overview

The course is an introduction to various approaches that will help students understand and intervene in the culture-technology nexus. It is intended primarily as an orientation for students in the Culture & Technology concentration of the Masters of Information program, but it endeavours to provide knowledge and skills to any graduate student exploring Science & Technology Studies (STS), Critical Media Studies, or Digital Humanities. In the course, we explore diverse approaches that have been brought to bear on this rich and densely-populated intersection. Philosophical, sociological, anthropological, historical, and literary questions will be examined relying on a series of thematics with broad resonance for students interested specifically in information and technology. Throughout the course, our goals will be:

- to challenge normative conceptions of the objects of study (science, technology, culture, information) and consider how the readings help us to come to more nuanced, complex, and effective understandings of these things;
- to acquire a rough map of the theoretical and methodological approaches that converge on "culture and technology," and understand how different approaches reinforce, complement, and contradict each other;
- to ask how these analyses can be used as tools to intervene effectively in debates about how culture and technology are co-constructed in the information age.

3. Learning Objectives and Outcomes

As a core course in the *Culture & Technology* concentration, INF1501 is particularly concerned with:

- helping students become conversant with fundamental concepts, theories, and practices in the social and cultural studies of technology, including basic familiarity with core concepts in STS, media studies, and cultural Studies;

- helping students cultivate a variety of research skills associated with these fields;
- helping students begin the process of understanding themselves as active participants in the intellectual conversations around information technology and its relationship to cultures.

In conjunction with the C&T concentration's other core courses, INF1501 should provide a solid foundation for future professional and intellectual development in the broad spectrum of careers at the intersection of culture and information technology. Completing this course should help students:

- confidently discuss topical issues at the intersection of culture and technology (e.g. algorithmic life and automation; information infrastructure; the attention economy);
- bring new research skills (e.g. ethnography; usability studies) to bear on their future work;
- and understand how these skills and ideas apply to a range of careers that require broad knowledge of how information, culture, and technology relate to each other.

4. Relationship between Course Learning Outcomes and Program Learning Outcomes

Students in the MI program should familiarize themselves with the MI student learning outcomes. Carrying out and reviewing cultural and technology research requires students to be able to apply concepts, theories, and practices derived from a range of information-related disciplines (Program Outcome 1). Understanding and developing the skills necessary to translate the insights gained from this work will facilitate access to knowledge, particularly for those in decision-making roles in information institutions (Program Outcome 2). Finally, in determining and producing knowledge translation objects, students will engage both pragmatically and theoretically with emerging information technologies, thereby developing both insight and skills that can contribute to extended intellectual growth beyond graduation. (Program Outcomes 4 & 5).

5. Class Structure

This course is structured along the lines of a graduate seminar crossed with an exploratory design process. We will open each class with a discussion of the course texts and their background. This conversation will generally take up half of the class each week. Students will help contextualize this discussion by identifying themes and questions from the text.

The remaining half of each class will be an opportunity for students to directly engage with the course material and put it into conversation with topical themes. This work will usually bear directly on the ongoing Implosion Project (refer to separate handout) - around which most of the graded work will be based.

6. Assignments

This course has one connected assignment with various parts (refer to the separate handout). An additional 15% is based on participation, which will be earned through the preparation of informal discussion prompts. These may take the form of provocations, statements, questions, relevant images, etc., and are meant to encourage you to take part in an ongoing dialogue about the themes of the course and the technological artifacts that you and your peers introduce. A minimum of three prompts per student will be expected, with each prompt being worth 5% (up to a total of 15% of the final mark). Prompts will be submitted in a discussion forum on Blackboard.

7. Weekly Readings

We will read parts of a number of books that you may want to own for yourself: Bruno Latour's *We Have Never Been Modern*; Lucy Suchman's *Human-Machine Reconfigurations: Plans and Situated Actions*; Jonathan Sterne's *MP3*; Gillespie, Boczkowski, and Foot's *Media Technologies*; and N. Katherine Hayle's *How We Became Posthuman*. Additionally, Sergio Sismondo's *An Introduction to Science and Technology Studies* offers helpful background to many of the texts and theoretical positions you will encounter in the course. If you find yourself wanting more context, you may find it to be a thorough field guide.

In additional to the required readings listed below, we will post weekly supplementary readings on Blackboard.

7.1. Introduction (Sept. 11)

7.2. What are Culture and Technology? (Sept. 18)

- Winner, Langdon. *The whale and the reactor: A search for limits in an age of high technology*. University of Chicago Press, 2010. Ch. 1 - "Technologies as forms of Life"
- Latour, Bruno. *We have never been modern*. Harvard University Press, 2012. Ch. 1 - "Crisis"
- Dumit, Joseph. "Writing the implosion: Teaching the world one thing at a time." *Cultural Anthropology* 29, no. 2 (2014): 344-362.

7.3. Methods of Interpretation and Analysis (Sept. 25)

- Pinch, Trevor J., and Wiebe E. Bijker. "The social construction of facts and artefacts: Or how the sociology of science and the sociology of technology might benefit each other." *Social studies of science* 14, no. 3 (1984): 399-441.
- Law, John. *After method: Mess in social science research*. Routledge, 2004. Ch. 2 - "Scientific Practices"
- Geertz, Clifford. *The Interpretation of Cultures*. New York: Basic books, 2006. Ch. 1 - "Thick Description: Toward an Interpretive Theory of Culture"

7.4. Epistemologies (Oct. 02)

- Donna Haraway, "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies* 14:3 (1988) 575-599.
- Harding, Sandra. "Rethinking standpoint epistemology: What is 'strong objectivity?'." *The Centennial Review* 36, no. 3 (1992): 437-470.

7.5. THANKSGIVING - NO CLASS (Oct. 09)

7.6. Truth and Authority (Oct. 16)

- Velleman, Paul F. "Truth, damn truth, and statistics." *Journal of Statistics Education* 16, no. 2 (2008).
- Huff, Darrell. *How to lie with statistics*. WW Norton & Company, 2010. Ch. 10 - "How to

talk back to a statistic"

- Zer-Aviv, Mushon. "Disinformation Visualization: How to Lie with Datavis." 2014. https://visualisingadvocacy.org/blog/disinformation-visualization-how-lie-datavis.
- Drucker, Johanna. "Digital Ontologies: The Ideality of Form in/and Code Storage—or—Can Graphesis Challenge Mathesis?." *Leonardo* 34, no. 2 (2001): 141-145.

7.7. Materialism(s) (Oct. 23)

- de Laet, Marianne, and Annemarie Mol. "The Zimbabwe bush pump: Mechanics of a fluid technology." *Social studies of science* 30, no. 2 (2000): 225-263.
- Sterne, "What do we want? Materiality. When do we want it? Now!" in Gillespie, Tarleton, Pablo J. Boczkowski, and Kirsten A. Foot, eds. *Media Technologies: Essays on Communication, Materiality, and Society*. Cambridge, MA: The MIT Press, 2014. 119-128.

7.8. Information and the Body (Oct. 30)

- Hayles, N. Katherine. *How we became posthuman: Virtual bodies in cybernetics, literature, and informatics*. University of Chicago Press, 2008. Ch. 3-4.
- Pickering, Andrew. "Cybernetics and the mangle: Ashby, Beer and Pask." *Social studies of science* 32, no. 3 (2002): 413-437.

7.9. READING WEEK – NO CLASS (NOV. 06)

7.10. Interactions (Nov. 13)

- Suchman, Lucy. *Human-machine reconfigurations: Plans and situated actions*. Cambridge University Press, 2007. Ch. 12, 15
- Woolgar, Steve. "Configuring the user: the case of usability trials." *The Sociological Review* 38, no. 1_{suppl} (1990): 58-99.
- Lialina, Olia. "Turing complete user." *Contemporary Home Computing*. (2012). http://contemporary-home-computing.org/turing-complete-user/

7.11. Infrastructures (Nov. 20)

- Bowker et al., "Toward Information Infrastructures", in Hunsinger et al. (eds.), *International Handbook of Internet Research*. Springer, 2010.
- Mattern, Shannon. "Infrastructural Tourism." *Places Journal* (2013). https://placesjournal.org/article/infrastructural-tourism/
- Mattern, Shannon. "Infrastructural Intelligence." *Words in Space* (2016). http://wordsinspace.net/shannon/2016/01/01/infrastructural-intelligence/

7.12. Standards, Formats, Interoperability (Nov. 27)

- Jonathan Sterne. "The mp3 as Cultural Artifact." *New Media and Society* 8, no. 5 (2006): 825–42.

- Gillespie, Tarleton. "Engineering a Principle: 'End-to-End' in the Design of the Internet." *Social Studies of Science* 36, no. 3 (2006): 427-457.
- Mackenzie, Adrian. "Codecs: Encoding/decoding images and sounds", in Fuller, Matthew, *Software Studies: A Lexicon*. Cambridge, MA: The MIT Press, 2008.

7.13. Algorithmic Life (Dec. 04)

- Bogost, Ian. "The cathedral of computation." *The Atlantic* 15 (2015). https://www.theatlantic.com/technology/archive/2015/01/the-cathedral-of-computation/384300/
- Gillespie, "The Relevance of Algorithms" in Boczkowski, Pablo J., Kirsten A. Foot, and Tarleton. Gillespie, eds. *Media Technologies: Essays on Communication, Materiality, and Society*. Cambridge, MA: The MIT Press, 2014.
- Amoore, Louise. "Algorithmic War: Everyday Geographies of the War on Terror." *Antipode* 41, no. 1 (January 2009): 49–69.

7.14. Connectivity - FINAL CLASS (Dec. 11)

- Simmel, Georg. "The metropolis and mental life." (1903).
- Postman, Neil. *Amusing ourselves to death: Public discourse in the age of show business*. Penguin., 2006. Ch. 11 - "The huxleyan warning"
- Morozov, Evgeny. "Only disconnect." *The New Yorker* (2013). http://www.newyorker.com/magazine/2013/10/28/only-disconnect-2
- Morozov, Evgeny. "The taming of tech criticism." *The Baffler* (2015). https://thebaffler.com/salvos/taming-tech-criticism