

**This is Technology & Society**  
**BUSS202COM**

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Student Hours:  
Thursday's 11am – 1pm

## **COURSE OVERVIEW**

Designed for communication post-graduate students, this course examines the deep theoretical foundation for further study of technology & society.

The course has been created for graduate students in areas of the social sciences, humanities, computer science, research software engineering and business who are interested in a grounding their research in theories of the social, political, economic and cultural contexts to understand technological change and inequalities.

While we are certainly at the forefront of so many new internet-inspired research interests and new forms of information technology, this course takes a deeper look at the philosophy of technologies – including historical approaches - comparison with already "old media", and the effect of so-called 'technological innovation' (e.g. corporate technology, self-tracking, AI, social media and smart apps).

At the end of the course, students should be able to

- 1) Identify key literature, technology issues and debates and describe their research interests within those debates from an interdisciplinary perspective;
- 2) Use the theoretical concepts of this course to support new research and further training in the area of technology;
- 3) Write in depth about the context and impact of technologies while developing your choice of research material;
- 4) Begin to undertake interdisciplinary work on technology and society.

## **EXPECTATIONS**

On this course, we are all practicing researchers, and this shapes how we approach the learning together. Your learning on this course consists of activities through which we can further improve our capacity for analysis and generation of ideas that are central to all our careers and professional training.

## **ASSIGNMENTS**

Students are expected to prepare for seminars, to read the assigned material, and to reflect on it so they are able to contribute to discussions in class.

Students will develop the art of critical reading and reflection - you are expected to write four short (400-500 words or about 1 page single spaced) **position papers** in preparation for each fortnightly seminar.

In each paper you will present a brief distillation/synthesis of a conceptual/theoretical question and take forward one or two key arguments that you wish to support or dispute. The **position papers** can be written on any two or more of the chapters/readings assigned for either or both days of a week, any four weeks you choose, but each paper must be posted to DUO by midnight *before* the class(es) for which the readings are assigned.

Full academic expectations apply to the position papers. These are not blog posts, or social media content. Students need to use appropriate in-text citations and a reference list at the end. Such texts are the beginnings of your own analytical thoughts on literature, on how a single reading is put within broader contexts, on how it impacts your perceptions and theoretical ideas, etc. In other words, these papers provide a first draft of your ideas and thoughts as a scholar for your research.

In addition to routine contributions to seminar discussions, you will help facilitate class discussions on two occasions during Michelmás Term as part of Open Discussion and a Deep Dive presentation.

### Final Paper

Students are required to produce a 3000-word essay on the topic of your choosing.

Position Papers	Each at 5%, total 20%
Reading and reflection DUO	20%
Class participation	20%
Final essay	40%

### **RESOURCES**

Together, we are practicing scholar in this field and we will collectively discover new reading material. To begin, there are key journals to read:

*Big Data & Society*  
*First Monday*;  
*Information, Communication, & Society*;  
*Journal of Computer Mediated Communication*;  
*Mobile Media & Communication*  
*New Media and Society*; *Science*,  
*Technology & Human Values*;  
*Technology and Culture*;  
*The Information Society*.

### **READINGS & SCHEDULE**

Most required readings will be available through the course Blackboard DUO; all articles and book chapters are available via the Bill Bryson campus Library and often accessible online. I strongly advocate you find the original hard copy texts as this will improve the way that you read and take notes.

#### **WeekOne > Introductions**

#### **Tuesday**

Manovich, L., 2003. New media from Borges to HTML. *The new media reader*, 1, pp.13-25.

McLuhan, Marshall. 1964. "The Medium is the Message" in *Understanding Media*. London and New York: Routledge Classics.

#### **Thursday**

Mitcham, C., 1994. *Thinking through technology: The path between engineering and philosophy*. University of Chicago Press.

Jenkins, H. and Deuze, M., 2008. *Convergence culture*.

Winner, Langdon. 1980. "Do artifacts have Politics?" *Daedalus*, 109: 121-36. Reprinted in MacKenzie and Wajcman, eds. *The Social Shaping of Technology*.

### **Week Two > Socio-historical Context to Technologies**

#### **Tuesday**

Fischer, Claude S. *American Calling: A Social History of the Telephone to 1940*. "Educating the Public."

Gitelman, L., 2006. Always already new. *Media, history, and the data of culture*, p.7.

Marvin, Carolyn. 1987. *When Old Technologies Were New*. Oxford: Oxford University Press. "Introduction" and "Inventing the Expert."

Standage, T., 1998. *The Victorian Internet: The remarkable story of the telegraph and the nineteenth century's online pioneers*. London: Phoenix.

Sterne, Jonathan, 2006. "Historicizing the Internet", in David Silver and Adrienne Massanari (Eds), in *Critical Cyberculture Studies*, New York: NYU Press. Chapter 7 and 10.

#### **Thursday**

Boczkowski, Pablo J. 1999. "Mutual Shaping of Users and Technologies in a National Virtual Community," *Journal of Communication* 49: 86-108.

Neff, Gina and David Stark. 2004. "Permanently Beta: Responsive Organization in the Internet Era," in Howard and Jones, eds., *Society Online: The Internet in Context*. Thousand Oaks, CA: Sage, pp 173-188.

Parks, M.R. and Roberts, L.D., 1998. Making MOOSic': The development of personal relationships on line and a comparison to their off-line counterparts. *Journal of social and personal relationships*, 15(4), pp.517-537.

### **Week Three > Technological Affordances – 'control'**

#### **Tuesday**

Readings from Julie Cohen, Mark Andrejevic., and Joseph Turrow to be distributed to the seminar.

#### **Thursday**

Bennett, W.L. and Segerberg, A., 2013. *The logic of connective action: Digital media and the personalization of contentious politics*. Cambridge University Press.

Chun, W.H.K., 2008. *Control and freedom: Power and paranoia in the age of fiber optics*. mit Press.

Galloway, Alexander R. 2004. *Protocol: How Control Exists after Decentralization*. Cambridge, Mass.: MIT Press, Intro, Chapter 1, Chapter 3, and Conclusion.

Earl, J. and Kimport, K., 2011. *Digitally enabled social change: Activism in the internet age*. Mit Press.

#### Week Four > Technology and 'work'

##### Tuesday

Barley, Stephen R. 1986. "Technology as an Occasion for Structuring: Evidence from Observations of CT Scanners and the Social Order of Radiology Departments," *Administrative Science Quarterly* 31(1):78-108.

Berner, B., 2008. Working knowledge as performance: on the practical understanding of machines. *Work, employment and society*, 22(2), pp.319-336.

Wajcman, J., 2006. New connections: social studies of science and technology and studies of work. *Work, employment and society*, 20(4), pp.773-786.

Wajcman, J., 2006. Technocapitalism meets technofeminism: women and technology in a wireless world. *Labour & Industry: a journal of the social and economic relations of work*, 16(3), pp.7-20.

##### Thursday

No seminar meeting – independent reading.

#### Week Five > Technology Infrastructure

##### Tuesday

Bijker, W.E., Hughes, T.P., Pinch, T. and Douglas, D., 2012. *The social construction of technological systems*. Anniversary edition. Select two chapters to read.

Mukerji, Chandra 2003. "Intelligent Uses of Engineering and the Legitimacy of State Power," *Technology and Culture* 44 (4): 655-676.

Trevor J. Pinch and Wiebe E. Bijker. 1984. "The Social Construction of Facts and Artefacts: or How the Sociology of Science and the Sociology of Technology might Benefit from Each Other." *Social Studies of Science* 14, 399-441.

##### Thursday

Jenkins, H. and Deuze, M., 2008. *Convergence culture*. (short intro).

Yochai Benkler, *The Wealth of Networks: How Social Production Transforms Markets and Freedom*. Yale University Press, 2006. Chapters 3, 4, 6 and 7.

Lance Bennett and Alexandra Segerberg 2012. "The Logics of Connective Action: Digital media and the personalization of contentious politics." *Information, Communication & Society* 15, 5.  
Online at [http://www.academia.edu/3054585/The\\_Logic\\_of\\_Connective\\_Action](http://www.academia.edu/3054585/The_Logic_of_Connective_Action)  
Or <http://www.tandfonline.com/doi/abs/10.1080/1369118X.2012.670661#preview>

## Week Six > Technology as Actor/Network/Tool – “space”

### Tuesday

Cohen, J.E., 2007. Cyberspace as/and Space. *Colum. L. Rev.*, 107, p.210.

Heidegger, Martin “The Question Concerning Technology”  
<http://www.scribd.com/doc/30112927/Martin-Heidegger-The-Question-Concerning-Technology>

Latour, Bruno. 1991. “Technology is Society Made Durable,” in John Law, ed. *A Sociology of Monsters: Essays on Power, Technology & Domination*. London: Routledge.

### Thursday

Latour, Bruno. 2007. *Reassembling the Social: An Introduction to Actor-Network Theory*. Oxford University Press. Selections.

Feenberg, A., 2011. Agency and citizenship in a technological society. *Presentation to the IT University of Copenhagen*. Available at: <http://www.sfu.ca/~andrewf/copen5-1.pdf> (Accessed: 12 August 2015).

## Week Seven > Posthuman, cyborgs, bodies, culture and behaviour

### Tuesday

Foot, K.A., 2014. Cultural-historical activity theory: Exploring a theory to inform practice and research. *Journal of Human Behaviour in the Social Environment*, 24(3), pp.329-347.

Kaptelinin, V. and Nardi, B.A., 2008. Acting with Technology, Activity Theory and Interaction Design. *Visible Language*, 42(2), p.196.

Reijo Miettinen The Riddle of Things: Activity Theory and Actor Network Theory as Approaches to Studying Innovations. *Mind, Culture & Activity* 6(3) 170-195.

### Thursday

Haraway, Donna J. 1991. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," in *Simians, Cyborgs and Women: The Reinvention of Nature*. New York; Routledge. Pp.149-181.

Gunkel, David. 2000. “We are Borg: Cyborgs and the Subject of Communication,” *Communication Theory* 10 (3):332-357.

Wajcman, Judy. 1995. "Feminist Theories of Technology" in Sheila Jasanoff, Gerald E. Markle, James C. Petersen and Trevor Pinch, eds. *Handbook of Science and Technology Studies*. Thousand Oaks: Sage. Pp. 189-204.

Hayles, N. Katherine. 1999. *How We Became Posthuman: Virtual Bodies in Cyberspace*. "Toward Embodied Virtuality" and "Virtual Bodies and Flickering Signifiers"

## Week Eight > Castells: Networks and Power

### Tuesday

Castells, Manuel. 2009. *Communication Power*, New York: Oxford University Press. Opening, Chapters 1-3.

Castells, M., 2011. Network theory | A network theory of power. *International Journal of Communication*, 5, p.15.

### Thursday

Castells, Manuel. 2009. *Communication Power*, New York: Oxford University Press. Chapters 4-5, & Conclusion.

## Week Nine > Data Gaze

### Tuesday

Barta, K. and Neff, G., 2016. Technologies for Sharing: lessons from Quantified Self about the political economy of platforms. *Information, Communication & Society*, 19(4), pp.518-531.

Beer, Dave. 2016. *Metric Power*. Palgrave MacMillan. Chapters: intro, Measurement, Possibility and Conclusion.

Sharon, T. and Zandbergen, D., 2017. From data fetishism to quantifying selves: Self-tracking practices and the other values of data. *New Media & Society*, 19(11), pp.1695-1709.

### Thursday

Readings on critical to be selected by to the students.

## Week Ten > Conclusions and Research Directions

### Tuesday

Open discussions

### Thursday

Wrap-Up