

DIGITAL TECHNOLOGY AND THE POLITICS OF THE INFORMATION AGE

POLSCI 730
Term 1, Fall 2020

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Seminar Time: Thursdays from 2:30 p.m. to 5:20 p.m.

Seminar Location: Virtual via Zoom

Office Hours: By appointment via [Calendly](#)

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Course Description

From the printing press to the atomic bomb to artificial intelligence, emergent technologies have had a profound impact on politics. This course examines the relationships between technological and political change, with a particular emphasis on digital technology and its applications to the practice of politics. The aim of the course is to further develop our understanding of the ways in which technology influences and is influenced by political dynamics. To that end we explore how the widespread adoption of various emergent technologies both conforms to and challenges different theoretical perspectives on politics. We do so by surveying a range of ideas and arguments in the field and then applying them within the context of technological transformation.

Course Objectives

By the end of the course students should be able to:

- Thoughtfully engage with debates between essentialist and constructivist perspectives as to the nature and role of technology in society;
- Formulate substantive arguments as to the political implications of emergent technological phenomena such as artificial intelligence, blockchain, autonomous warfare, social media, and workforce automation;
- Critically interrogate how competing theoretical perspectives grapple with the social and political transformation that has accompanied the widespread adoption of various new technologies; and
- Contribute meaningfully to discussions on potential regulatory responses to specific emergent technologies.

Required Materials and Texts

There are no required textbooks for this course, but students are required to access and read all the required readings that are listed below. Most are available from the McMaster online library collections and are hyperlinked in the electronic version of this course outline. Book chapters and other readings not available in electronic format from the library will be posted on the Avenue to Learn site for this course.

Class Format

The course involves weekly three-hour seminar sessions conducted via Zoom. The link for the seminar sessions is <https://mcmaster.zoom.us/j/92954380073>.

Each week's seminar will be led by one of the seminar participants, who will serve as discussant. The discussant will begin the session with prepared remarks on the week's key readings and then open up the floor for discussion. The other seminar participants will then provide their comments on the week's readings in a "tour de table" format. The instructor will chair the discussion to ensure that each reading is discussed and that the

focus and order of discussion is clear, and will provide ongoing clarifications and commentary. Otherwise the discussion will be driven by comments provided by the seminar participants.

Course Evaluation – Overview

1. Participation – 20%, due throughout the course
2. Discussant Papers – 2 x 15% each = 30%, due on individually-assigned weeks
3. Discussant Presentation – 10%, due on individually-assigned weeks
4. Think Piece – 40%, due December 17

Course Evaluation – Details

Participation (20%)

Ongoing throughout the course

This component of the grade is based on active verbal participation and not simply attendance. Presentations given in connection with the assignments listed elsewhere are not included in the grading of this component. The following, in priority order, are criteria that will be used in evaluating your verbal seminar participation: (a) the degree to which you have demonstrated by your comments that you have read the assigned readings; (b) the frequency of your comments; (c) the degree to which your comments engage and respect the agenda and the comments of others; (d) the originality and insightfulness of your comments.

The instructor will grade your participation in each seminar and then average the weekly grades at the end of the course to arrive at a final participation grade (week 1 will not be graded for participation). In the event of a missed class, there is the option of providing an additional discussant paper on that week's readings. This can be submitted any time up to the last class.

Discussant Papers (30%)

2 x 15% each, due on individually-assigned weeks during the course

Each seminar participant will be assigned two weeks of the course during for which they prepare a discussant paper not longer than 1,000 words.

Please submit your rank-ordered list of your preferred weeks to act as discussant using the following link: https://docs.google.com/spreadsheets/d/1nGCL9_EjfgGlr50w2yc-R3QQPt4f_7UAK-0zQzFHrs/ by **Tuesday, September 22 at 5 p.m. EST**. Please rank all weeks from 3 to 13 (excluding the winter mid-term recess).

The discussant paper is intended to offer the following analysis of each of the key readings assigned in a given week:

Internal Critique—assess the logic of the arguments offered on their own ground. Do the conclusions reached actually flow from the assumptions at the foundation of the work? Is the argument sound?

External Critique—assess the logic of the arguments put forward in relation to other theories and ideas. Strive to explain how the theories or arguments speak to one another.

Extension to practical matters—discuss how the ideas presented each work relate to practical questions of technology and society. Go beyond the empirical case of the work to think about other areas.

The aim of the discussant paper is not to summarize the week's readings, but rather to explore aspects of each of the readings that you find interesting, problematic, right, or wrong.

Discussant papers should be posted to Avenue to Learn by 11:59 p.m. EST on the Tuesday prior to the corresponding seminar so that the instructor and seminar participants have an opportunity to review the paper in advance of the discussion. Discussant papers are to be posted to the Discussion section of Avenue to Learn under the topic header of the corresponding week. Fellow seminar participants should feel free to reply to discussant papers in threads if they so wish—either in advance of the corresponding seminar or as a follow-up.

Discussant Presentation (10%)

Due on individually-assigned weeks during the course

On one of the weeks for which you are assigned a discussant paper, you will also lead that week's seminar discussion. This involves presenting the analysis offered in your discussant paper. You should not simply read your discussant paper verbatim. Your analysis and critiques should be presented in a discussion format that invites feedback and commentary from fellow seminar participants. Presentations should run between 20 and 30 minutes long and conclude with a kick-off question to catalyze further discussion among seminar participants.

Think Piece (40%)

Due December 17

In this exercise you will identify an instance of digital transformation within an institution or set of institutions and posit the nature of the relationship between technology and society that resulted in the critical juncture you have chosen to examine. You may adopt a strong or weak technological determinist argument, a social constructionist lens, or a more nuanced approach, but you must substantively address the counterarguments and alternate perspectives that might be presented by competing schools of thought.

Papers should not exceed 5,000 words should be submitted via Avenue to Learn by 11:59 p.m. on December 17.

Weekly Course Schedule and Required Readings

Week 1 (Sep 17) Introduction

Readings: None

Notes: Please submit your rank-ordered list of your preferred weeks to act as discussant at https://docs.google.com/spreadsheets/d/1nGCL9_EjfgGlr50w2yc-R3QQPt4f_7UAK-0zQzFHrs/ by **Tuesday, September 22 at 5 p.m. EST.**

Please rank all weeks from 3 to 13 (excluding the mid-term recess).

Week 2 (Sep 24) Philosophy of Technology

Required Readings:

Feenberg, Andrew. "Technology, Philosophy, Politics" and "Technology and Meaning," in [Questioning Technology](#). London: Routledge (1999), 1-17 and 183-199.

Wajcman, Judy. "[Addressing Technological Change: The Challenge to Social Theory](#)." *Current Sociology* 50, no. 3 (2002): 347-363.

Winner, Langdon. "[Upon Opening the Black Box and Finding It Empty: Social Constructivism and the Philosophy of Technology](#)." *Science, Technology, & Human Values* 18, no. 3 (Summer, 1993): 362-378.

Supplementary Readings:

Habermas, Jürgen. "Technology and Science as 'Ideology'" in *Toward a Rational Society*. Boston: Beacon Press (1970), 81-122.

Heidegger, Martin. "The Question Concerning Technology" in *The Question Concerning Technology and Other Essays*. New York: Harper and Row (1977), 3-35.

Latour, Bruno. "Technology is Society Made Durable." *The Sociological Review*, 38, no 1. (1990): 103–131.

Van Wyk, Rias Johann. *Technology: a unifying code: a simple and coherent view of technology*. Stage Media Group (2004).

Borgmann, Albert. *Technology and the character of contemporary life: a philosophical inquiry*. Chicago: University of Chicago Press (1984).

Week 3 (Oct 1) Technological Determinism

Required Readings:

Heilbroner, Robert L. "[Do Machines Make History?](#)" *Technology and Culture* 8, no. 3 (1967): 335-345.

Winner, Langdon. "[Do Artifacts Have Politics?](#)" *Daedalus* 109, no. 1 (1980): 121-136.

Bimber, Bruce. "[Karl Marx and the Three Faces of Technological Determinism.](#)" *Social Studies of Science* 20, no. 2 (1990): 333-351.

MacKenzie, Donald and Judy Wajcman. "[Introductory Essay: The Social Shaping of Technology.](#)" in *The social shaping of technology*. 2nd edition. Buckingham: Open University Press (1999), 3-27.

Wyatt, Sally. "[Technological determinism is dead; Long live technological determinism.](#)" in Edward J. Hackett, Olga Amsterdamska, Michael Lynch, and Judy Wajcman, eds., *The handbook of science and technology studies*. 3rd edition. Cambridge: MIT Press (2008), 166-180.

Supplementary Readings:

Smith, Merritt Roe and Leo Marx, eds., *Does technology drive history? The dilemma of technological determinism*. Cambridge: MIT Press (1994).

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.

Latour, Bruno. *Reassembling the social: An introduction to actor-network-theory*. Oxford University Press (2005).

Shaw, William H. "The Handmill Gives You the Feudal Lord': Marx's Technological Determinism." *History and Theory* 18, no. 2 (1979): 155-176.

Goody, Jack. *Technology, Tradition and the State in Africa*. London: Routledge (1971).

Carey, James. "Time, Space, and the Telegraph" in *Communication as Culture* Boston: Unwin Hyman (1989): 213-222.

Forrester, Jay. "[Counterintuitive Behaviour of Social Systems](#)" in *Technology Review*. (1971): 1-29.

Hoffman, Jeanette. "[Mediated democracy - Linking digital technology to political agency.](#)" *Internet Policy Review* 8, no. 2 (2019).

Week 4 (Oct 8) Architectures of Control

Required Readings:

Galič, Maša, Tjerk Timan and Bert-Jaap Koops. "[Bentham, Deleuze and Beyond: An Overview of Surveillance Theories from the Panopticon to Participation](#)," *Philosophy and Technology* 30, no. 1 (2017): 9-37.

Lessig, Lawrence. "Code is Law" and "Architectures of Control" in [Code: Version 2.0](#). New York: Pegasus Books (2006), 1-8 and 38-60.

Nye, David. "Does technology control us?" in [Technology Matters: Questions to Live With](#). Cambridge: MIT Press (2006), 17-32.

Buterin, Vitalik. "[Control as Liability](#)" (2019).

Supplementary Readings:

Foucault, Michel. "Panopticism" in [Discipline and Punish: The Birth of the Prison](#). New York: Vintage Books (1977), 195-228.

Caluya, Gilbert. "[The post-panoptic society? Reassessing Foucault in surveillance studies](#)," *Social Identities* 16, no.5 (2010): 621-633,

Ronald Deibert, "Black Code: Censorship, Surveillance, and the Militarisation of Cyberspace," *Millennium: Journal of International Studies* 32, no. 3: 501-530.

MacKenzie, Donald and Judy Wajcman, eds. *The social shaping of technology*. 2nd edition. Buckingham: Open University Press (1999).

Sunstein, Cass R. "The Daily Me" in [#Republic: Divided Democracy in the Age of Social Media](#). Princeton University Press (2017): 1-30.

Chinese State Council. *Planning Outline for the Construction of a Social Credit System (2014-2020)*. Beijing (2014).

Creemers, Rogier. [China's Social Credit System: An Evolving Practice of Control](#) (2018).

Week 5 (Oct 15) Winter mid-term recess, NO CLASS

Week 6 (Oct 22) Algorithmic Accountability

Required Readings:

Danks, David, and Alex John London. "[Algorithmic bias in autonomous systems](#)." In *Proceedings of the Twenty-Sixth International Joint Conference on Artificial Intelligence* (2017): 4691-4697.

Awad, Edmond, Sohan Dsouza, Richard Kim, Jonathan Schulz, Joseph Henrich, Azim Shariff, Jean-François Bonnefon and Iyad Rahwan, "[The Moral Machine experiment](#)," *Nature* 563, no. 7729 (2018): 59-64.

Bonnefon, Jean-François, Azim Shariff, and Iyad Rahwan, "[The social dilemma of autonomous vehicles](#)," *Science* 352, no. 6293 (2016): 1573-1576.

Angwin, Julia, Jeff Larson, Surya Mattu, and Lauren Kirchner, "[Machine Bias: There's software used across the country to predict future criminals. And it's biased against blacks](#)," *ProPublica* (May 2016).

Tom Simonite, "[AI Software Is Better than Judges at Determining Whether Criminal Defendants Are Flight Risks](#)," *MIT Technology Review* (2017).

Supplementary Readings:

Kroll, Joshua, Joanna Huey, Solon Barocas, Edward Felten, Joel Reidenberg, David Robinson and Harlan Yu, "[Accountable Algorithms](#)," *University of Pennsylvania Law Review*, Vol. 165 (2017): 633-704.

Goodman, Bryce, and Seth Flaxman. "[EU regulations on algorithmic decision-making and a 'right to explanation'](#)". *arXiv preprint arXiv:1606.08813* (2016).

Crawford, Kate. "[Artificial Intelligence's White Guy Problem](#)," *The New York Times* (June 26, 2016).

Jeremy Hsu, "[AI Learns Gender and Racial Biases from Language](#)," *IEEE Spectrum: Technology, Engineering, and Science News* (April 13, 2017).

Diakopoulos, Nicholas. "[Algorithmic accountability: Journalistic investigation of computational power structures](#)." *Digital Journalism* 3, no. 3 (2015): 398-415.

Fink, Katherine. "[Opening the government's black boxes: freedom of information and algorithmic accountability](#)." *Information, Communication & Society* 21, no. 10 (2018): 1453-1471.

Kleinberg, Jon, Himabindu Lakkaraju, Jure Leskovec, Jens Ludwig, and Sendhil Mullainathan, "[Human Decisions and Machine Predictions](#)," *The Quarterly Journal of Economics* 133 no. 1 (2018): 237-293.

Week 7 (Oct 29) Technology and the State

Required Readings:

Anderson, Benedict. "The Origins of National Consciousness," in [Imagined Communities: Reflections on the Origin and Spread of Nationalism](#). New York: Verso (1993 [2006]): 37-46.

Owen, Taylor. "Disruptive Power" and "The Crisis of the State," in [Disruptive Power: The Crisis of the State in the Digital Age](#). Oxford University Press (2015), 22-47 and 189-210.

Deibert, Ron. "[The geopolitics of cyberspace after Snowden](#)." *Current History* 114, no. 768 (2015): 9-15.

Atzori, Marcella. "[Blockchain Technology and Decentralized Governance: Is the State Still Necessary?](#)" (December 1, 2015).

Supplementary Readings:

Castells, Manuel. "[The New Public Sphere: Global Civil Society, Communication Networks, and Global Governance](#)," *The Annals of the American Academy of Political and Social Science* 616:1 (2008), pp. 78-93.

Garrett, Banning. "[How Technology Is Driving Us Toward Peak Globalization](#)." Singularity University (2017).

Adria, Marco. *Technology and Nationalism*. Montreal: McGill-Queen's University Press (2009).

McLuhan, Marshall. "The Printed Word: Architect of Nationalism," in *Understanding Media: The Extensions of Man*. New York: McGraw-Hill (1964): 155-162.

Edgerton, David. "[The Contradictions of Techno-Nationalism and Techno-Globalism: A Historical Perspective](#)." *New Global Studies* 1, no. 1 (2007): 1-32.

Week 8 (Nov 5) Technology and Democracy

Required Readings:

Barney, Darin. "[Radical Citizenship in the Republic of Technology: A Sketch](#)," in Lincoln Dahlberg and Eugenia Siapera, eds., *Radical Democracy and the Internet*. New York: Palgrave Macmillan (2007): pp. 37-54.

Sunstein, Cass R. "Citizens" in *#Republic: Divided Democracy in the Age of Social Media*. Princeton University Press (2017): 157-175.

Persily, Nathaniel. "[The 2016 U.S. Election: Can Democracy Survive the Internet?](#)" *Journal of Democracy* 28, no. 2 (2017): 63-76.

Bennett, Lance. "[The Personalization of Politics: Political Identity, Social Media, and Changing Patterns of Participation](#)." *The Annals of the American Academy of Political and Social Science* 644, no. 1 (2012): 20-39.

Kreiss, Daniel and Shannon McGregor. "[Technology Firms Shape Political Communication: The Work of Microsoft, Facebook, Twitter, and Google With Campaigns During the 2016 U.S. Presidential Cycle](#)." *Political Communication* 35, no. 2 (2018): 155-177.

Supplementary Readings:

- Owen, Taylor. "Spaces of Dissent," in [*Disruptive Power: The Crisis of the State in the Digital Age*](#). Oxford University Press (2015), 48-66.
- Zaheer Baber, "Engendering or Endangering Democracy? The Internet, Civil Society and the Public Sphere," *Asian Journal of Social Science* 30 (2002): 287-303.
- Philip Howard, "[Is Social Media Killing Democracy?](#)" *Policy and Internet Blog* (November 15, 2016).
- Funk, McKenzie. "[Cambridge Analytica and the Secret Agenda of a Facebook Quiz](#)," *The New York Times* (November 19, 2016).
- Delmas, Candice. "Is Hacktivism the New Civil Disobedience?" *Raisons politiques* 69, no. 1 (2018): 63-81.
- Anna Everett, "Have We Become Postracial Yet? Race and Media Technology in the Age of President Obama" in Lisa Nakamura and Peter Chow-White, eds., *Race after the Internet* (New York: Routledge, 2012): 146-167.
- Barlow, John Perry. [*A Declaration of the Independence of Cyberspace*](#). Geneva: Electronic Frontier Foundation (1996).
- Coleman, Gabriella. "[Anonymous in context: The politics and power behind the mask](#)." *Internet Governance Papers, No. 3*. Centre for International Governance Innovation (2013).
- Vosoughi, Soroush, Deb Roy and Sinan Aral. "[The spread of true and false news online](#)," *Science* (2018), pp. 1146-1151.
- Barnidge, Matthew. "[Exposure to Political Disagreement in Social Media Versus Face-to-Face and Anonymous Online Settings](#)," *Political Communication*, 34:2 (2016): 302-321.
- Loader, Brian and Dan Mercea, "[Networking Democracy?](#)" *Information, Communication & Society* 14:6 (2011), pp. 757-769.
- Singer, Jane. "[User-generated visibility: Secondary gatekeeping in a shared media space](#)." *New Media & Society* 16, no 1 (2018): 55-73.

Week 9 (Nov 12) Technology and Governance

Required Readings:

Lessig, Lawrence. "Regulating Code" in [*Code: Version 2.0*](#). New York: Pegasus Books (2006): 61-80.

Campbell-Verduyn, Malcolm. "Introduction: what are blockchains and how are they relevant to governance in the contemporary global political economy?" in [*Bitcoin and Beyond: Cryptocurrencies, Blockchains, and Global Governance*](#). Routledge (2018): 1-24.

Kuziemski, Maciej and Gianluca Misuraca. "[AI governance in the public sector: Three tales from the frontiers of automated decision-making in democratic settings](#)." *Telecommunications Policy* 44, no. 6 (2020).

DeNardis, Laura. [*The Global War for Internet Governance*](#). New Haven: Yale University Press (2014): 1-32.

Supplementary Readings:

- DeNardis, L., and A.M. Hackl. 2015. "[Internet Governance by Social Media Platforms](#)." *Telecommunications Policy* 39(9): 761–70.
- Nooren, Pieter, Nicolai van Gorp, Nico van Eijk, and Ronan Ó Fathaigh. 2018. "Should We Regulate Digital Platforms? A New Framework for Evaluating Policy Options." *Policy & Internet* 10(3): 264–301.
- Risse, Mathias. 2019. "Human Rights and Artificial Intelligence: An Urgently Needed Agenda." *Human Rights Quarterly* 41(1): 1–16.
- Ebert, Hannes, and Tim Maurer. 2013. "Contested Cyberspace and Rising Powers." *Third World Quarterly* 34(6): 1054–74.
- Andrews, Leighton. 2019. "Public Administration, Public Leadership and the Construction of Public Value in the Age of the Algorithm and 'Big Data.'" *Public Administration* 97(2): 296–310.
- DeNardis, Laura. 2009. *Protocol Politics: The Globalization of Internet Governance*. MIT Press.
- Feldstein, Steven. 2019. "The Road to Digital Unfreedom: How Artificial Intelligence Is Reshaping Repression." *Journal of Democracy* 30(1): 40–52.
- Nakamoto, Satoshi. "[Bitcoin: A Peer-to-Peer Electronic Cash System](#)." (2008).
- Libra Association. "[An Introduction to Libra](#)." (2019): 1-12.

Week 10 (Nov 19): Technology and Security

Required Readings:

- Buzan, Barry, Ole Wæver, and Jaap De Wilde. "[Security Analysis: Conceptual Apparatus](#)," in *Security: a new framework for analysis*. Lynne Rienner Publishers (1998), 21-47.
- Deibert, Ronald and Rafal Rohozinski, "[Good for liberty, bad for security? Global civil society and the securitization of the Internet](#)," in Ronald Deibert, John Palfrey, Rafal Rohozinski, and Jonathan Zittrain, eds., *Access Denied: The Practice and Policy of Global Internet Filtering*. Cambridge, MA: MIT Press (2008): 123-149.
- Charli Carpenter, "[Rethinking the Political / -Science- / Fiction Nexus: Global Policy Making and the Campaign to Stop Killer Robots](#)," *Perspectives on Politics* 14:1 (2016), pp. 53-69.

Bostrom, Nick. "Is the default outcome doom?" in *Superintelligence: Paths, Dangers, Strategies*. Oxford University Press (2014): 115-126.

Supplementary Readings:

Beckstead, Nick, Nick Bostrom, Niel Bowerman, Owen Cotton-Barratt, William McAskill, Seán Ó hÉigeartaigh, and Toby Ord. [Unprecedented Technological Risks](#) (Policy Brief). Oxford: Future of Humanity Institute (2014).

Nissenbaum, Helen. "[Where computer security meets national security.](#)" *Ethics and Information Technology* 7, no. 2 (2005): 61-73.

Week 11 (Nov 26) Technology and Violence

Required Readings:

Roland, Alex. "[Science, Technology, and War.](#)" *Technology and Culture* 36, no. 2 (1995): S83-100.

Sauer, Frank and Niklas Schornig. "[Killer Drones: The 'silver bullet' of democratic warfare?](#)" *Security Dialogue* 43, no. 3 (2012): 363-380.

Allenby, Brad. "[The Implications of Emerging Technologies for Just War Theory.](#)" *Public Affairs Quarterly* 27, no. 1 (2013): 49-67.

Safransky, Sara. "[Geographies of Algorithmic Violence: Redlining the Smart City.](#)" *International Journal of Urban and Regional Research* 44, no. 2 (2020): 200-218.

Supplementary Readings:

Crootof, Rebecca. "The Killer Robots Are Here: Legal and Policy Implications," *Cardozo Law Review* 36, no. 5 (2015): 1837-1916.

Roff, Heather "The Strategic Robot Problem: Lethal Autonomous Weapons in War," *Journal of Military Ethics* 13 (2014): 211-227.

Fuhrmann, Matthew, and Michael C. Horowitz. "Droning On: Explaining the Proliferation of Unmanned Aerial Vehicles." *International Organization* 71, no. 2 (2017): 397-418.

van Niekerk, Brett. "Information warfare as a continuation of politics: An analysis of cyber incidents." In *Information Communications Technology and Society (ICTAS), 2018 Conference on*, pp. 1-6. IEEE, 2018.

Lindsay, Jon. "Stuxnet and the Limits of Cyber Warfare," *Security Studies* 22, no. 3 (2013): 365-404.

Rid, Thomas. "Cyber War Will Not Take Place" *Journal of Strategic Studies* 35, no. 1 (2012): 5-32.

- Stone, John. "Cyber War Will Take Place!" *Journal of Strategic Studies* 36, no 1 (2013): 101-108.
- Singer, Peter. "Military Robotics and Ethics: A World of Killer Apps" *Nature*, 477 (2011): 399-401.
- U.S. Department of Defense Directive 3000.09: [Autonomy in Weapon Systems](#) (November 21, 2012).

Week 12 (Dec 3) Political Economy of Technology

Required Readings:

- Tsalikis, Catherine. "[Shoshana Zuboff on the Undetectable, Indecipherable World of Surveillance Capitalism](#)." Centre for International Governance Innovation (2019).
- Martin, Chris. "[The sharing economy: A pathway to sustainability or a nightmarish form of neoliberal capitalism?](#)" *Ecological Economics* 121 (January 2016): 149-159.
- Erik Brynjolfsson and Andrew McAfee, "[Human Work in the Robotic Future: Policy for the Age of Automation](#)," *Foreign Affairs* 95, no. 4 (July/August 2016): 139-150.
- Drutman, Lee and Yascha Mounk. "[When the Robots Rise](#)," *The National Interest* (July-August 2016).

Supplementary Readings:

- Castells, Manuel. "[The New Economy: Informationalism, Globalisation, Networking](#)," in *The Rise of the Network Society. The Information Age: Economy, Society, and Culture Volume I (Information Age Series)*. London: Blackwell (1996), 101-162.
- Autor, David, and Anna Salomons. "[Is automation labor-displacing? Productivity growth, employment, and the labor share](#)." Brookings Institution (2018): 1-35.
- Loewen, Peter, and Benjamin Allen Stevens. "[Automation, AI and Anxiety: Policy Preferred, Populism Possible](#)." Public Policy Forum (2019).
- Rifkin, Jeremy. *The End of Work: The Decline of the Global Labor Force and the Dawn of the Post-Market Era*. New York: GP Putnam's Sons (1995).
- Ashford, Nicholas and Ralph Hall. *Technology, Globalization and Sustainable Development: Transforming the Industrial State*. Yale University Press (2011).
- "[The Future of Jobs: Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution](#)." Geneva: World Economic Forum (2016).
- Dundon, Tony and Debra Howcroft, "[Automation, robots and the 'end of work' myth](#)," *The Conversation* (January 16, 2018).

Rotman, David. "[The Relentless Pace of Automation.](#)" *MIT Technology Review* (February 13, 2017).

Week 13 (Dec 10) Technology and Gender

Required Readings:

Wajcman, Judy. "[Reflections on Gender and Technology Studies: In What State is the Art?](#)" *Social studies of science* 30, no. 3 (2000): 447-464.

Williams, Rosalind. "The political and feminist dimensions of technological determinism," in Merritt Roe Smith and Leo Marx, eds., *Does technology drive history? The dilemma of technological determinism*. Cambridge: MIT Press, 1994, pp. 217-236.

Wilcox, Lauren. "[Embodying algorithmic war: Gender, race, and the posthuman in drone warfare.](#)" *Security Dialogue* 48:1 (2017), pp. 11-28.

Trauth, Eileen M. "[Odd girl out: an individual differences perspective on women in the IT profession.](#)" *Information Technology & People* 15, no. 2 (2002): 98-118.

Boyle, Karen and Chamil Rathnayake, "[#HimToo and the networking of misogyny in the age of #MeToo.](#)" *Feminist Media Studies* (2019): 1-19.

Supplementary Readings:

Donna Haraway, "[A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century,](#)" in Simians, Cyborgs, and Women: *The Reinvention of Nature* (Routledge, 1990), 149-182.

"The Industry Gender Gap" in [The Future of Jobs: Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution](#) (Report). Geneva: World Economic Forum (2016): 33-42.

Gurumurthy, Anita and Nandini Chami. [Digital Technologies and Gender Justice in India: An analysis of key policy and programming concerns](#) (Submission to the High Level Committee on the Status of Women in India). Bangalore: IT for Change (2014).

McGee, Kimberly. "The influence of gender, and race/ethnicity on advancement in information technology (IT)." *Information and Organization* 28, no. 1 (2018): 1-36.

van der Spuy, Anri and Namita Aavriti. [Mapping Research in Gender and Digital Technology](#). Association for Progressive Communications (2017).

Criado-Perez, Caroline. "One-Size-Fits-Men" in *Invisible Women: Exposing Data Bias in a World Designed for Men* (2019): 157-168.

Chang, Emily. *Brotopia: Breaking Up the Boys' Club of Silicon Valley*. Portfolio, 2019.

Course Policies

Submission of Assignments

All assignments are to be submitted via Avenue to Learn. Discussant papers are to be posted under the corresponding topic in the Discussions Forum. Policy papers are to be submitted through the Assignments module.

Grades

Grades will be based on the McMaster University grading scale:

MARK	GRADE
90-100	A+
85-90	A
80-84	A-
77-79	B+
73-76	B
70-72	B-
69-0	F

Late Assignments

All requests for deadline extensions must be made in advance of the assignment's original deadline, and must be accompanied by a documented justification for why a deadline extension is needed. Challenges such as clustering of assignments or final presentations in other courses that were announced earlier in the term should be anticipated and planned for. It is your responsibility to make contingency plans for unforeseen problems such as computer and car failures. Assignments that are completed after the deadline, if accepted, will be penalized by one grade point per day including Saturday and Sunday (a grade point is the interval between A+ and A, A and A-, etc.).

Absences, Missed Work, Illness

Extensions on assignments can be arranged in the event of illness or similar circumstances. All extensions must be arranged in advance of the day on which a paper is due.

Avenue to Learn

In this course we will be using Avenue to Learn. Students should be aware that, when they access the electronic components of this course, private information such as first and last names, user names for the McMaster e-mail accounts, and program affiliation may become apparent to all other students in the same course. The available information is dependent on the technology used. Continuation in this course will be deemed consent to this disclosure. If you have any questions or concerns about such disclosure please discuss this with the course instructor.

Turnitin.com

In this course we will be using a web-based service (Turnitin.com) to reveal plagiarism. Students will be expected to submit their work electronically to Turnitin.com and in hard copy so that it can be checked for academic dishonesty. Students who do not wish to submit their work to Turnitin.com must still submit a copy to the instructor. No penalty will be assigned to a student who does not submit work to Turnitin.com. All submitted work is subject to normal verification that standards of academic integrity have been upheld (e.g., on-line search, etc.). To see the Turnitin.com Policy, please go to the [Office of Academic Integrity](#).

Copyright and Recording

Students are advised that lectures, demonstrations, performances, and any other course material provided by an instructor include copyright protected works. The Copyright Act and copyright law protect every original literary, dramatic, musical and artistic work, **including lectures** by University instructors

The recording of lectures, tutorials, or other methods of instruction may occur during a course. Recording may be done by either the instructor for the purpose of authorized distribution, or by a student for the purpose of personal study. Students should be aware that their voice and/or image may be recorded by others during the class. Please speak with the instructor if this is a concern for you.

Academic Accommodation for Religious, Indigenous or Spiritual Observances (RISO)

Students requiring academic accommodation based on religious, indigenous or spiritual observances should follow the procedures set out in the [RISO](#) policy. Students should submit their request to their Faculty Office **normally within 10 working days** of the beginning of term in which they anticipate a need for accommodation or to the Registrar's Office prior to their examinations. Students should also contact their instructors as soon as possible to make alternative arrangements for classes, assignments, and tests.

Academic Integrity Statement

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity.

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the [Academic Integrity Policy](#).

The following illustrates only three forms of academic dishonesty

- Plagiarism, e.g. the submission of work that is not one's own or for which other credit has been obtained.
- Improper collaboration in group work.
- Copying or using unauthorized aids in tests and examinations.

Conduct Expectations

As a McMaster student, you have the right to experience, and the responsibility to demonstrate, respectful and dignified interactions within all of our living, learning and working communities. These expectations are described in the [Code of Student Rights & Responsibilities](#) (the "Code"). All students share the responsibility of maintaining a positive environment for the academic and personal growth of all McMaster community members, **whether in person or online**.

It is essential that students be mindful of their interactions online, as the Code remains in effect in virtual learning environments. The Code applies to any interactions that adversely affect, disrupt, or interfere with reasonable participation in University activities. Student disruptions or behaviours that interfere with university functions on online platforms (e.g. use of Avenue 2 Learn, WebEx or Zoom for delivery), will be taken very seriously and will be investigated. Outcomes may include restriction or removal of the involved students' access to these platforms

Academic Accommodation of Students with Disabilities

Students with disabilities who require academic accommodation must contact [Student Accessibility Services](#) (SAS) at 905-525-9140 ext. 28652 or sas@mcmaster.ca to make arrangements with a Program Coordinator. For further information, consult McMaster University's [Academic Accommodation of Students with Disabilities](#) policy.

Faculty of Social Sciences E-mail Communication Policy

Effective September 1, 2010, it is the policy of the Faculty of Social Sciences that all e-mail communication sent from students to instructors (including TAs), and from students to staff, must originate from the student's own McMaster University e-mail account. This policy protects confidentiality and confirms the identity of the student. It is the student's responsibility to ensure that communication is sent to the university from a McMaster account. If an instructor becomes aware that a communication has come from an alternate address, the instructor may not reply at his or her discretion.

Course Modification

The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check his/her McMaster email and course websites weekly during the term and to note any changes.

Extreme Circumstances

The University reserves the right to change the dates and deadlines for any or all courses in extreme circumstances (e.g., severe weather, labour disruptions, etc.). Changes will be communicated through regular McMaster communication channels, such as McMaster Daily News, A2L and/or McMaster email.