# **SELECTED POLITICAL PROBLEMS I: POLITICS OF TECHNOLOGY**

# POLSCI 780 Term 2, Winter 2019

**Instructor:** Clifton van der Linden Office: KTH 506 Office Hours: By appointment

Email: <a href="mailto:cliff.vanderlinden@mcmaster.ca">cliff.vanderlinden@mcmaster.ca</a>

Seminar: Tuesdays, 11:30 am-2:20 pm

Room: KTH 709

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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. 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 25%, due throughout the course
- 2. Discussant Papers 2 x 20% each = 40%, due on individually-assigned weeks
- 3. Thought Paper 35%, due April 16

# **Course Evaluation – Details**

# Participation (25%)

### Due 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 <u>two</u> weeks of the course during for which they prepare a discussant paper not longer than 1,500 words.

Please submit your rank-ordered list of your preferred weeks to act as discussant at <a href="https://docs.google.com/spreadsheets/d/1EOLB2LsL2WWQcII-3yi-HQB16ajihXFhAoMVvLTEO4c">https://docs.google.com/spreadsheets/d/1EOLB2LsL2WWQcII-3yi-HQB16ajihXFhAoMVvLTEO4c</a> by **Friday, January 11 at 5 p.m. EST**. Please rank all weeks from 2 to 14 (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 argument on its 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 argument 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.

<u>Discussant papers should be e-mailed to the instructor by 5 p.m. EST the day prior to the corresponding seminar</u>. The instructor will post the discussant papers on Avenue to Learn by 8 p.m. EST that same day so that participants have an opportunity to review the paper in advance of the seminar.

### **Discussant Presentation (10%)**

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 kick-off questions that catalyze further discussion among seminar participants.

### **Thought Paper (35%)**

### **Due April 16**

Thought paper topics will be assigned during the last seminar and will be due one week thereafter. Thought papers should not exceed 3,000 words and will draw exclusively on the key readings from the course.

# Weekly Course Schedule and Required Readings

# Week 1 (Jan 8) Introduction

Readings: None

Notes: Please submit your rank-ordered list of your preferred weeks to act as discussant at <a href="https://docs.google.com/spreadsheets/d/1EOLB2LsL2WWQcII-3yi-HQB16ajihXFhAoMVvLTEO4c">https://docs.google.com/spreadsheets/d/1EOLB2LsL2WWQcII-3yi-HQB16ajihXFhAoMVvLTEO4c</a> by **Friday, January 11 at 5 p.m. EST**. Please rank all weeks from 2 to 14 (excluding the winter mid-term recess).

# Week 2 (Jan 15) Philosophy of Technology

Key Readings:

Feenberg, Andrew. "Technology, Philosophy, Politics" and "Technology and Meaning," in <u>Questioning Technology</u>. London: Routledge (1999), 1-17 and 183-199. [33 pages]

Winner, Langdon. "<u>Upon Opening the Black Box and Finding It Empty: Social Constructivism and the Philosophy of Technology</u>." *Science, Technology, & Human Values* 18, no. 3 (Summer, 1993): 362-378. [16 pages]

Wajcman, Judy. "<u>Addressing Technological Change: The Challenge to Social Theory</u>." *Current Sociology* 50, no. 3 (2002): 347-363. [16 pages]

#### Other 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 (Jan 22) Technological Determinism

Key Readings:

Heilbroner, Robert L. "<u>Do Machines Make History?</u>" *Technology and Culture* 8, no. 3 (1967): 335-45. [10 pages]

Winner, Langdon. "<u>Do Artifacts Have Politics?</u>" *Daedalus* 109, no. 1 (1980): 121-36. [15 pages]

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. [24 pages]

Wyatt, Sally. "<u>Technological determinism is dead; Long live technological determinism</u>," 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. [14 pages]

Bimber, Bruce. "Karl Marx and the Three Faces of Technological Determinism." Social Studies of Science 20, no. 2 (1990): 333-51. [18 pages]

#### Other 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).
- McLuhan, Marshall. "The Printed Word: Architect of Nationalism," in Understanding Media: The Extensions of Man. New York: McGraw-Hill (1964): 155-162.
- 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.
- Carey, James. "Time, Space, and the Telegraph" in *Communication as Culture* Boston: Unwin Hyman (1989): 213-222.

# Week 4 (Jan 29) Architectures of Control

Key Readings:

Nye, David. "Does technology control us?" in <u>Technology Matters: Questions to Live With</u>. Cambridge: MIT Press (2006), 17-32. [15 pages]

Foucault, Michel. "Panopticism" in <u>Discipline and Punish: The Birth of the Prison</u>. New York: Vintage Books (1977), 195-228. [33 pages]

Lessig, Lawrence. "Code is Law" and "Architectures of Control" in <u>Code: Version</u> <u>2.0</u>. New York: Pegasus Books (2006), 1-8 and 38-60. [30 pages]

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

#### Other readings:

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

Creemers, Rogier. <u>China's Social Credit System: An Evolving Practice of Control</u> (2018).

# Week 5 (Feb 5) Technology, Globalization, and the State

Key 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. [15 pages]

Deibert, Ron. "The geopolitics of cyberspace after Snowden." Current History 114, no. 768 (2015): 9-15. [6 pages]

Owen, Taylor. "Disruptive Power" and "The Crisis of the State," in <u>Disruptive</u> <u>Power: The Crisis of the State in the Digital Age</u>. Oxford University Press (2015), 22-47 and 189-210. [46 pages]

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

Other Readings:

Garrett, Banning. "<u>How Technology Is Driving Us Toward Peak Globalization</u>." Singularity University (2017).

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

# Week 6 (Feb 12) Political Economy of Technology

Key Readings:

Castells, Manuel. "<u>The New Economy: Informationalism, Globalisation,</u> <u>Networking</u>," in *The Rise of the Network Society. The Information Age: Economy, Society, and Culture Volume I (Information Age Series)*. London: Blackwell (1996), 101-162 [61 pages].

Martin, Chris. "The sharing economy: A pathway to sustainability or a nightmarish form of neoliberal capitalism?" Ecological Economics 121 (January 2016): 149-159. [10 pages]

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

Drutman, Lee and Yascha Mounk. "When the Robots Rise," The National Interest (July-August 2016).

Atzori, Marcella. "Blockchain Technology and Decentralized Governance: Is the State Still Necessary?" (December 1, 2015). [37 pages]

#### Other readings:

- 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).
- Dundon, Tony and Debra Howcroft, "<u>Automation, robots and the 'end of work'</u> myth," *The Conversation* (January 16, 2018).
- 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 (Report)." Geneva: World Economic Forum (2016).
- Swan, Melanie. *Blockchain: Blueprint for a new economy*. O'Reilly Media, Inc. (2015).
- Narayanan, Arvind, Joseph Bonneau, Edward Felten, Andrew Miller, and Steven Goldfeder. *Bitcoin and cryptocurrency technologies: a comprehensive introduction*. Princeton University Press (2016).
- Nakamoto, Satoshi. "Bitcoin: A Peer-to-Peer Electronic Cash System." (2008).
- David Golumbia, *The politics of bitcoin: software as right-wing extremism.*Minneapolis: University of Minnesota Press (2016).

# Week 7 (Feb 19) Winter mid-term recess, NO CLASS

# Week 8 (Feb 26) Technology and Public Policy

Key Readings:

Lessig, Lawrence. "Regulating Code" in <u>Code: Version 2.0</u>. New York: Pegasus Books (2006), 61-80. [19 pages]

Erik Brynjolfsson and Andrew McAfee, "<u>Human Work in the Robotic Future:</u> <u>Policy for the Age of Automation</u>," *Foreign Affairs* 95, no. 4 (July/August 2016): 139-150. [11 pages]

Awad, Edmond, Sohan Dsouza, Richard Kim, Jonathan Schulz, Joseph Henrich, Azim Shariff, Jean-François Bonnefon and Iyad Rahwan, "<u>The Moral Machine</u> <u>experiment</u>," *Nature* 563, no. 7729 (2018): 59-64. [5 pages]

Bonnefon, Jean-François, Azim Shariff, and Iyad Rahwan, "The social dilemma of autonomous vehicles," Science 352, no. 6293 (2016): 1573-1576. [3 pages]

Bostrom, Nick. "<u>Strategic Implications of Openness in AI Development</u>," *Global Policy* 8, no 2 (2017): 135-149. [14 pages]

#### Other Readings:

- Fuhrmann, Matthew, and Michael C. Horowitz. "Droning On: Explaining the Proliferation of Unmanned Aerial Vehicles." *International Organization* 71, no. 2 (2017): 397-418.
- Executive Office of the President of the United States of America and National Science and Technology Council Committee on Technology. <u>Preparing for the Future of Artificial Intelligence</u>. White House Office of Science and Technology Policy (2016).
- Dutton, Tim, Brent Barron and Gaga Boskovic. <u>Building an Al World: Report on National and Regional Al Strategies</u>. Ottawa: Canadian Institute for Advanced Research (CIFAR) (2018).
- Casper, Steven. Creating Silicon Valley in Europe: Public Policy Towards New Technology Industries in Comparative Perspective. Oxford: Oxford University Press (2007).
- Ablon, Lillian and Andrea Golay, "How the 'wonks' of public policy and the 'geeks' of tech can get together," Tech Crunch (March 17, 2016)

# Week 9 (Mar 5) Technology and Civil Society

Key Readings:

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. [19 pages]

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. [26 pages]

Owen, Taylor. "Spaces of Dissent," in <u>Disruptive Power: The Crisis of the State in</u> <u>the Digital Age</u>. Oxford University Press (2015), 48-66. [18 pages]

Barnidge, Matthew. "Exposure to Political Disagreement in Social Media Versus Face-to-Face and Anonymous Online Settings," Political Communication, 34:2 (2016): 302-321. [19 pages]

#### Other Readings:

- Barlow, John Perry. <u>A Declaration of the Independence of Cyberspace</u>. 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).
- Delmas, Candice. "Is Hacktivism the New Civil Disobedience?" *Raisons politiques* 69, no. 1 (2018): 63-81.
- Martinez-Torres, Maria Elena. "Civil society, the Internet, and the Zapatistas," *Peace Review* 13, no. 3 (2001): 347-355.

# Week 10 (Mar 12) Technology, Democracy, and Citizenship Key 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. [17 pages]

Sunstein, Cass R. "Citizens" in #Republic: Divided Democracy in the Age of Social Media. Princeton University Press (2017): 157-175. [18 pages]

Persily, Nathaniel. "The 2016 U.S. Election: Can Democracy Survive the Internet?" Journal of Democracy 28, no. 2 (2017): 63-76. [13 pages]

Loader, Brian and Dan Mercea, "Networking Democracy?" Information, Communication & Society 14:6 (2011), pp. 757-769. [12 pages]

Vosoughi, Soroush, Deb Roy and Sinan Aral, "<u>The spread of true and false news online</u>," *Science* (2018), pp. 1146-1151. [5 pages]

### Other Readings:

- 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).

# Week 11 (Mar. 19): Technology and Security

Key Readings:

Buzan, Barry, Ole Wæver, and Jaap De Wilde. "<u>Security Analysis: Conceptual Apparatus</u>," in *Security: a new framework for analysis*. Lynne Rienner Publishers (1998), 21-47. [26 pages]

Nissenbaum, Helen. "Where computer security meets national security." Ethics and Information Technology 7, no. 2 (2005): 61-73. [12 pages]

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. [16 pages]

Bostrom, Nick. "Is the default outcome doom?" in *Superintelligence: Paths, Dangers, Strategies*. Oxford University Press (2014): 115-126. [11 pages]

Other Readings:

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

# Week 12 (Mar 26) Technology and Warfare

Key Readings:

Erik Gartzke, "The Myth of Cyberwar: Bringing War in Cyberspace Back Down to Earth," International Security 38:2 (2013), pp. 41-73. [32 pages]

Berzina, Ieva. "<u>The Narrative of 'Information Warfare against Russia' in Russian Academic Discourse</u>." *Journal of Political Marketing* 17, no. 2 (2018): 161-175. [14 pages]

Allenby, Brad. "<u>The Implications of Emerging Technologies for Just War Theory</u>." *Public Affairs Quarterly* 27, no. 1 (2013): 49-67. [18 pages]

Frank Sauer and Niklas Schornig "Killer Drones: The 'silver bullet' of democratic warfare?" Security Dialogue 43, no. 3 (2012): 363-380. [17 pages]

Other Readings:

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

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

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

- 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: <u>Autonomy in Weapon Systems</u> (November 21, 2012).
- Richard Potember, "Perspectives on Research in Artificial Intelligence and Artificial General Intelligence Relevant to DoD." JSR-16-Task-003. JASON The MITRE Corporation (2017).

### Week 13 (Apr 2) Technology and Gender

Key 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. [17 pages]

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. [19 pages]

Donna Haraway, "<u>A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century</u>," in Simians, Cyborgs, and Women: The Reinvention of Nature (Routledge, 1990), 149-182. [33 pages]

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. [20 pages]

#### Other Readings:

- "The Industry Gender Gap" in <u>The Future of Jobs: Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution</u> (Report). Geneva: World Economic Forum (2016): 33-42.
- Gurumurthy, Anita and Nandini Chami. <u>Digital Technologies and Gender Justice</u> 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).
- Wilcox, Lauren. "Embodying algorithmic war: Gender, race, and the posthuman in drone warfare." *Security Dialogue* 48:1 (2017), pp. 11-28.
- 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. <u>Mapping Research in Gender and Digital</u> <u>Technology</u>. Association for Progressive Communications (2017).

# Week 14 (Apr 9) Algorithmic Bias and Accountability

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. [6 pages]

Diakopoulos, Nicholas. "<u>Algorithmic accountability: Journalistic investigation of computational power structures</u>." *Digital Journalism* 3, no. 3 (2015): 398-415. [17 pages]

Fink, Katherine. "Opening the government's black boxes: freedom of information and algorithmic accountability." *Information, Communication & Society* 21, no. 10 (2018): 1453-1471. [18 pages]

Goodman, Bryce, and Seth Flaxman. "<u>EU regulations on algorithmic decision-making and a 'right to explanation'</u>". *arXiv preprint arXiv:1606.08813* (2016). [4 pages]

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. [71 pages]

### Other Readings:

- Angwin, Julia, Jeff Larson, Surya Mattu, and Lauren Kirchner, "<u>Machine Bias:</u>
  <u>There's software used across the country to predict future criminals. And it's biased against blacks</u>," *Propublica* (May 2016).
- Crawford, Kate. "Artificial Intelligence's White Guy Problem," The New York Times (June 26, 2016).
- Jeremy Hsu, "<u>Al Learns Gender and Racial Biases from Language</u>," *IEEE Spectrum: Technology, Engineering, and Science News* (April 13, 2017).
- Tom Simonite, "AI Software Is Better than Judges at Determining Whether Criminal Defendants Are Flight Risks," MIT Technology Review (2017).

# **Course Policies**

### **Submission of Assignments**

Written work must be submitted in hard copy in class. Electronic copies of any assignment will only be accepted if prior arrangements have been made with Prof. van der Linden.

#### **Grades**

Grades will be based on the McMaster University grading scale:

MARK	GRADE
90-100	A+
85-90	Α
80-84	A-
77-79	B+
73-76	В
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 to go to the Office of Academic Integrity.

# **University Policies**

### **Academic Integrity Statement**

You are expected to exhibit honesty and use ethical behavior 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 behavior 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 <u>Academic Integrity Policy</u>.

The following illustrates only three forms of academic dishonesty:

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

#### **Academic Accommodation of Students with Disabilities**

Students who require academic accommodation must contact Student Accessibility Services (SAS) to make arrangements with a Program Coordinator. Academic accommodations must be arranged for each term of study. Student Accessibility Services can be contacted by phone 905-525-9140 ext. 28652 or e-mail <a href="mailto:sas@mcmaster.ca">sas@mcmaster.ca</a>. For further information, consult McMaster University's Policy for Academic Accommodation of Students with Disabilities.

### **Faculty of Social Sciences E-mail Communication Policy**

Effective September 1, 2010, it is the policy of the Faculty of Social Sciences that all email 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.