

McMaster University
Arts & Science Program
ARTSSCI 3BB3 - Technology and Society II

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2021/22 (Winter 2022)
Lecture: Tuesday 11:30-2:20
Classroom – HH 305

Course Description

This course is about the interaction between technology and society. It will especially focus on the impact of technology on the economy, the world of work, and the lives of working people. It will also explore how technology has changed the shape and direction of social movements and affected public discourse about key social issues. We will explore these questions in historical perspective and looking forward to the impact of emergent technologies.

The format of the course will be a mixture of lecture and discussion. The instructor will start the exploration of each subject with a lecture, and then students will discuss key themes from both the lectures and the readings. Engaged and constructive discussion is essential for the course to work; in-class participation thus makes up a substantial portion of the grade. Most of the class will be in open seminar format, although if needed, the instructor may delegate students or groups to prepare questions and lead the discussion.

Course Objectives

By the end of this course, students will be able to:

1. Understand and discuss the many of the key social issues raised by technological change, especially as it relates to work and workers` lives.
2. Use some of the main theories, concepts, and analytical approaches to the current debate about technological change.
3. Pose important research questions about technology and society, develop analytical responses to these questions and organize research papers around their arguments.
4. Find and assess research sources, critically evaluate scholarly studies on technology and society, and use evidence in supporting their analytical positions.

Required Texts

- There is a great deal of excellent material on this subject online. All course readings will be available online (open access) or through the course's Avenue to Learn website.

Additional Reading

There are a number of important studies that students will also find valuable for both understanding course material and doing their research papers. Some of the required reading are selections from these books:

- Nicholas Carr, *The Shallows – What the Internet is Doing to Our Brains*
- Cathy O’Neill, *Weapons of Math Destruction – How Big Data Increases Inequality and Threatens our Democracy*
- Robert Gordon, *The Rise and Fall of American Growth: The US Standard of Living Since the Civil War*
- Nicholas Dyer-Witthford, *Cyber-Proletariat – Global Labour in the Digital Vortex*
- Tim Wu, *The Attention Merchants – The Epic Scramble to Get Inside Our Heads*
- Mariana Mazzucato, *The Entrepreneurial State- Debunking Public vs. Private Sector Myths*
- Franklin Foer, *World Without Mind – The Existential Threat of Big Technology*
- Evgeny Morozov, *To Save Everything, Click Here – the Follow of Technological Solutionism*
- Margaret O’Mara, *The Code – Silicon Valley and the Remaking of America*
- Jaron Lanier, *10 Arguments for Deleting Your Social Media Accounts Right Now*
- Tom Slee, *What’s Yours is Mine – Against the Sharing Economy*
- Meredith Broussard, *Artificial Un-Intelligence – How Computers Misunderstand the World*
- Sheera Frenkel and Cecelia Kang, *An Ugly Truth – Inside Facebook’s Battle for Domination*
- Benkler, Faris and Roberts, *Network Propaganda – Manipulation, Disinformation, and Radicalization in American Politics*
- Siva Vaidhyanathan, *Anti-Social Media: How Facebook Disconnects Us and Undermines Democracy*

Marking Scheme and Due Dates

Source Review	February 8	15%
Major Essay	March 15	40%
Participation	In Class	20%
Final Exam	Exam period	25%

- More details about the assignments will be provided in handouts as the course goes on.
- **Late Penalties** for assignments:
 - **First 3 days:** 1% per day. (This means 1% out of 100 on that assignment, not 1% from the final course grade.)
 - **After first 3 days:** 2% per day. (This means 2% out of 100 on that assignment, not 2% from the final course grade.)

Outline of Topics and Readings

****Important Note When Reading the Outline:** My approach is to offer 1-2 things for you all to read some weeks. In other weeks I offer a wider range of reading options and you will choose – sometimes in advance – who will cover what readings. This latter approach often facilitates better discussion, as it helps students to bring different information and/or perspectives to the table.

1. Introduction – January 11
2. The Tech-Jobs Panic – January 18 & 25
 - a. The Pessimists
 - i. Frei and Osborne, *Technology at Work*, Parts 1 & 2 (pp.7-22)
 1. https://ir.citi.com/jowGiIw%2FoLrkDA%2BldI1U%2FYUEpWP9ifowg%2F4HmeO9kYfZiN3SeZwWEvPez7gYEZ_XmxsFM7eq1gc0%3D
 - ii. Daniel Susskind and Richard Susskind, “The Future of Professions”
 1. Search for the authors or the title at:
<https://www2.lse.ac.uk/lse-player>
 - b. The Optimists
 - i. The Roosevelt Institute, “Don’t Fear the Robots: Why Automation Doesn’t Mean the End of Work.” Read: Introduction & Sections 1&2
<https://rooseveltinstitute.org/wp-content/uploads/2020/07/RI-Don%E2%80%99t-Fear-the-Robots-201806.pdf>
 - ii. TED Talk, David Autor, “Will Automation take away all our jobs?”
https://www.ted.com/talks/david_autor_why_are_there_still_so_many_jobs/discussion?CMP

Recommended Further Reading:

David Autor – Why Are There Still So Many Jobs?

<https://economics.mit.edu/files/11563>

Lacity and Wilcocks – Service Automation and the Future of Work, LSE Presentation

<http://www.lse.ac.uk/newsAndMedia/videoAndAudio/channels/publicLecturesAndEvents/player.aspx?id=3492>

3. Politics & Policy of Tech – February 1 & 8
 - a. Where Does Innovation Really Come From? – March 8
 - i. Mariana Mazzucato, *The Entrepreneurial State*, Revised Edition, Chapter 5 – “The State Behind the iPhone”
 1. Pdf on ATL
 - ii. Thomas Friedman, “Do You Want the Good News First?”
 1. <http://www.nytimes.com/2012/05/20/opinion/sunday/friedman-do-you-want-the-good-news-first.html>
 - iii. Gina Kolata, “Kati Kariko Helped Shield the World From the Coronavirus,” *New York Times*
 1. <https://www.nytimes.com/2021/04/08/health/coronavirus-mrna-kariko.html>
 - iv. Farhad Manjoo, “The Chip That Could Transform Computing” *New York Times*
 1. <https://www.nytimes.com/2021/11/10/opinion/apple-microprocessor.html>
 - b. Policy Responses – the UBI?
 - i. Advocacy Group’s Case for UBI: UBI Works, “Why We Need UBI” <https://www.ubiworks.ca/whynow>
 - ii. Edvard P.G. Bruun & Alban Duka, “Artificial Intelligence, Jobs and the Future of Work: Racing with the Machines,” *Basic Income Studies* (Pdf on ATL)
 - iii. Tom Malleson and David Calnitsky, “Which Way Forward for Economic Security: Basic Income or Public Services?” *Basic Income Studies* (Pdf on ATL)
4. The Historical Perspective – February 15 & March 1
 - a. Disruption and Response – The Early Cases
 - i. Eric Hobsbawm, “The Machine Breakers”
 1. <https://libcom.org/history/machine-breakers-eric-hobsbawm>
 - ii. Jeff Horn, “Understanding Crowd Action: Machine Breaking in England and France”
 1. <http://quod.lib.umich.edu/cgi/p/pod/dod-idx/understanding-crowd-action-machine-breaking-in-england.pdf?c=wsfh;idno=0642292.0031.009>

Mid-Term Break – February 22 – No Class

- b. 2nd Industrial Revolution – Technology and Modern Life
 - i. Robert Gordon
 - 1. *Rise and Fall of American Growth* – Chapter 4: “The American Home: From Dark and Isolated to Bright and Networked”
 - a. PDF on Avenue
 - ii. Jean-Paul Sartre – “Collectives and the Queue”
 - 1. <https://www.marxists.org/reference/archive/sartre/works/critic/collectives.htm>
 - iii. Film: Charlie Chaplain, *Modern Times*
 - iv. Kevin Kelley, “Scan This Book!”
 - 1. <http://www.nytimes.com/2006/05/14/magazine/14publishing.html>
5. The Sceptics – March 8 & 15
- a. The Stagnation Thesis
 - i. Robert Gordon, “Is US Economic Growth Over?”
 - 1. <http://www.nber.org/papers/w18315.pdf>
 - ii. Tyler Cowan, “The Complacent Class”
 - 1. http://www.econtalk.org/archives/2017/05/tyler_cowen_on_1.html
 - 2. <https://www.theatlantic.com/business/archive/2017/03/did-american-complacency-lead-to-trump/518586/> (Book review)
 - b. Does Tech Really Produce Better Results?
 - i. Nicholas Carr, “Is Google Making Us Stupid?”
 - 1. <http://www.theatlantic.com/magazine/archive/2008/07/is-google-making-us-stupid/306868/>
 - ii. Cathy O’Neil – Misrule of Algorithms
 - 1. <http://www.cbc.ca/radio/spark/331-it-s-overcomplicated-simpsons-by-the-data-and-more-1.3794248/weapons-of-math-destruction-1.3800536>
 - iii. Meredith Broussard – Technochauvinism
 - 1. “People Problems” from *Artificial Unintelligence*
 - a. Pdf on ATL
 - 2. Interview with Derek Thompson, “Tech Was Supposed to be Society’s Great Equalizer. What Happened?” *The Atlantic*
 - a. <https://www.theatlantic.com/technology/archive/2018/09/tech-was-supposed-to-be-societys-great-equalizer-what-happened/571660/>

- iv. Kashmir Hill, “Wrongfully Accused by an Algorithm” *New York Times*
 - 1. <https://www.nytimes.com/2020/06/24/technology/facial-recognition-arrest.html>

- 6. Tech and Social Empowerment? - March 22, 29 & April 5
 - a. A Force for Liberation? The Early Debate
 - i. John Pollock, “Streetbook”
 - 1. <https://www.technologyreview.com/2011/08/23/117825/streetbook/>
 - ii. Phillip Howard et al, “Opening Closed Regimes”
 - 1. <https://www.library.cornell.edu/colldev/mideast/Role%20of%20Social%20Media%20During%20the%20Arab%20Spring.pdf>
 - iii. Malcolm Gladwell, “Small Change”
 - 1. <https://www.newyorker.com/magazine/2010/10/04/small-change-malcolm-gladwell>
 - iv. Evgeny Morozov, “The Google Doctrine,” from *The Net Delusion*
 - 1. Pdf on Avenue

 - b. “Mind-Control for Profit” – Misinformation and Propaganda
 - i. Renee DiResta, “The Digital Maginot Line,” *Ribbonfarm*
 - 1. <https://www.ribbonfarm.com/2018/11/28/the-digital-maginot-line/>
 - ii. Renee DiResta, “Computational Propaganda – Public Relations in a high-tech age,”
 - 1. <https://yalereview.org/article/computational-propaganda>
 - iii. Frenkel and Chang, *An Ugly Truth*, Chapter TBA
 - iv. Pew Research Centre, “Publics in Emerging Economies Worry Social Media Sow Division, Even as They Offer New Chances for Political Engagement.” Intro & Sections 1-3.
 - 1. <https://www.pewresearch.org/internet/2019/05/13/publics-in-emerging-economies-worry-social-media-sow-division-even-as-they-offer-new-chances-for-political-engagement/>

 - v. Recommended Extra Material:
 - 1. *The Social Dilemma* – film on Netflix
 - 2. Franklin Foer, “Facebook’s War on Free Will”
 - a. <https://www.theguardian.com/technology/2017/sep/19/facebooks-war-on-free-will>

- c. The Challenge of Regulating Social Media Platforms
 - i. Olivier Sylvain, “Discriminatory Designs on User Data,” *Knight First Amendment Institute at Columbia University*.
 - 1. <https://knightcolumbia.org/content/discriminatory-designs-user-data>
 - ii. Danielle Keats Citron, “Section 230’s Challenge to Civil Rights and Civil Liberties,” *Knight First Amendment Institute at Columbia University*.
 - 1. <https://knightcolumbia.org/content/section-230s-challenge-civil-rights-and-civil-liberties>
 - iii. Daphne Keller, “Six Constitutional Hurdles for Platform Speech Regulation,” *Centre for Internet and Society*
 - 1. <http://cyberlaw.stanford.edu/blog/2021/01/six-constitutional-hurdles-platform-speech-regulation-0>
 - iv. Renee DiResta, “It’s Not Misinformation. It’s Amplified Propaganda,” *The Atlantic*
 - 1. <https://www.theatlantic.com/ideas/archive/2021/10/disinformation-propaganda-amplification-ampliganda/620334/>
 - v. Primers from the media:
 - 1. Siva Vaidhyanathan, “Regulating Facebook will be one of the greatest challenges in human history,” *Guardian*,
 - a. <https://www.theguardian.com/commentisfree/2019/apr/28/regulating-facebook-will-be-one-of-the-greatest-challenges-in-human-history>
 - 2. Michael Smith and Marshal Van Alstyne, “It’s Time to Update Section 230,” *Harvard Business Review*
 - a. <https://hbr.org/2021/08/its-time-to-update-section-230>
 - 3. Farhad Majoo, “Facebook is Bad. Fixing it Rashly Could Make it Much Worse.” *New York Times*.
 - a. <https://www.nytimes.com/2021/10/27/opinion/facebook-regulation-section-230.html>

7. Wrap Up and Exam Prep – April 12

SENATE-APPROVED ADVISORY STATEMENTS

ACADEMIC INTEGRITY

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. **It is your responsibility to understand what constitutes academic dishonesty.**

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. For information on the various types of academic dishonesty please refer to the [Academic Integrity Policy](https://secretariat.mcmaster.ca/university-policies-procedures-guidelines/), located at <https://secretariat.mcmaster.ca/university-policies-procedures-guidelines/>.

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.

AUTHENTICITY / PLAGIARISM DETECTION

Some courses may use a web-based service (Turnitin.com) to reveal authenticity and ownership of student submitted work. For courses using such software, students will be expected to submit their work electronically either directly to Turnitin.com or via an online learning platform (e.g. A2L, etc.) using plagiarism detection (a service supported by Turnitin.com) so it can be checked for academic dishonesty.

Students who do not wish their work to be submitted through the plagiarism detection software must inform the Instructor before the assignment is due. No penalty will be assigned to a student who does not submit work to the plagiarism detection software. **All submitted work is subject to normal verification that standards of academic integrity have been upheld** (e.g., online search, other software, etc.). For more details about McMaster’s use of Turnitin.com please go to www.mcmaster.ca/academicintegrity.

COURSES WITH AN ONLINE ELEMENT

Some courses may use online elements (e.g. e-mail, Avenue to Learn (A2L), LearnLink, web pages, capa, Moodle, ThinkingCap, etc.). Students should be aware that, when they access the electronic components of a course using these elements, 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 a course that uses online elements will be deemed consent to this disclosure. If you have any questions or concerns about such disclosure please discuss this with the course instructor.

ONLINE PROCTORING

Some courses may use online proctoring software for tests and exams. This software may require students to turn on their video camera, present identification, monitor and record their computer activities, and/or lock/restrict their browser or other applications/software during tests or exams. This software may be required to be installed before the test/exam begins.

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.

REQUESTS FOR RELIEF FOR MISSED ACADEMIC TERM WORK

In the event of an absence for medical or other reasons, students should review and follow the [Policy on Requests for Relief for Missed Academic Term Work](#).

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.

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 either by 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.

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.

NOTES FOR ALL ARTS & SCIENCE COURSES

1. Some of the statements above refer to a “Faculty Office”; please note that the Arts & Science Program Office serves in this capacity.
2. It is the responsibility of students to check their McMaster email regularly. Announcements will be made in class, via A2L, and/or via the course email distribution list.
3. For additional information regarding requests for accommodation, relief for missed term work (e.g. MSAF), deferred examinations, etc., students should read carefully the [Requests](#) and [Resources](#) pages on the Arts & Science Program website.