

**ISSUES INTERNATIONAL RELATIONS &
GLOBAL PUBLIC POLICY: GLOBAL TECHNOPOLITICS
POL SCI 3B03
Fall 2021, Term 1**

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Lecture: Mostly asynchronous, with synchronous discussion MWTh 4:30-5:20pm. Most weeks we will only use the WTh time slot.

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Contents

Course Description.....	4
Course Objectives.....	4
Required Materials and Texts	4
Class Format.....	5
Course Evaluation – Overview	5
Course Evaluation – Details	6
Individual profile page, 2%. Due Wednesday September 15, midnight.	6
Weekly quizzes on readings, 35% of final course grade.....	6
Topic statement and research proposal, 10% of final course grade..	6
One research paper, 4000 words – 33%, due by Monday December 7, midnight.....	7
<i>Group research project option.</i>	8
Group discussion of readings, 10%. Due through the course.....	9
Asynchronous group options.	10
Weekly Course Schedule and Required Readings	10
Week 1. Introduction and welcome (Wed., Thurs., September 8-9)	10
Week 2. Theorizing global technopolitics I (Sept. 15, 16).....	11
Week 3. Theorizing global technopolitics II (Sept. 22, 23).....	11
Week 4. Information and communications technology (Sept. 29, 30).....	11
Week 5. Technology, law, regulation and governance (Oct. 6, 7)	12
Week 5. Reading week, no class (Oct. 11-15).....	12
Week 6. Technology and cities (Oct. 20, 21).....	12

Week 7. Technology, war, cybersecurity (Oct. 27, 28)	12
Week 8. Blockchain, fintech (Nov. 3, 4).....	13
Week 9. Technology and nature, biotechnology (Nov. 10, 11)	13
Week 10. Technology, pandemics, and global health (Nov. 17, 18).....	14
Week 11. Technology and the future of work (Nov. 24, 25).....	14
Week 12. Technology and North-South issues (Dec. 1, 2).....	14
Week 13. Technology, science and democracy (Dec. 7).....	15
Course Policies	15
Submission of Assignments.....	15
Grades.....	16
Late Assignments	16
Absences, Missed Work, Illness	16
Courses with an On-Line Element.....	17
Online Proctoring.....	17
Authenticity / Plagiarism Detection	17
Copyright and Recording	17
Academic Accommodation for Religious, Indigenous or Spiritual Observances (RISO)	18
Academic Integrity Statement.....	18
Conduct Expectations.....	18
Academic Accommodation of Students with Disabilities.....	19
Faculty of Social Sciences E-mail Communication Policy	19
Course Modification.....	19
Extreme Circumstances.....	19
Appendix A: Some possible research topics	20
Appendix B: Supplementary Readings.....	21
Theorizing global technopolitics I & II	21
Race and technology.....	23
Information and communications technology.....	23
Technology, law, regulation and governance	24
Technology and cities.....	25
Innovation policy and environmental transitions	26
Technology, war, cybersecurity	28

Artificial intelligence, blockchain, fintech.....	29
Technology and nature, biotechnology.....	30
Technology, pandemics, and global health.....	31
Technology and the future of work.....	31
North-South issues	32
Technology, science and democracy.....	32
Appendix C: Research Proposal Form.....	38

Course Description

Human lives today are thoroughly entangled with technologies such as smart phones, health care robots, killer drones, and genetic engineering. Technologies are implicated in our most daunting political challenges, such as how to benefit from new technologies in workplaces without massive job loss; how to be connected digitally while protecting privacy; how to generate innovation without harmful social inequality; how to reconcile the tension between science and democracy; how to avoid artificial intelligence outpacing our capacity to understand and control it; how to address gender biases in technology; and how to prevent the destruction of nature by technology. All these political challenges cross national borders and are complicated by the system of sovereign states, as especially evident, for instance, by the uses of technology for war, for globally destabilizing financial innovations, for responding to pandemics and other global health problems, or for such geo-political conflicts as US-China tensions over Huawei's role in 5G networks. This course will explore ways to understand conceptually and address in practice the global political challenges associated with technology.

Course Objectives

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

- Articulate contrasting theoretical perspectives on the relationships between politics, policy, globalization and technology
- Understand key historical changes in the relationship between technology and governance
- Have an empirical understanding of some particularly significant recent political challenges related to technological change
- Be able to make informed recommendations about how governments and other policy stakeholders should respond to technological challenges
- Engage with confidence in informed synchronous or asynchronous discussion with peers about these issues
- Produce a final research paper that has an element of originality in its theorization, empirical content, or practical recommendations.

Required Materials and Texts

- There is no required textbook for this course. All required readings are listed below. These will be accessible either via the hyperlinks in the list of required readings in this course outline, or on the Avenue site for this course. If the hyperlink doesn't work, you can simply search for the article name in the library catalogue, if it is a library holding. If you have any problem accessing the reading please let the instructor know as soon as possible so that an alternative way to access it can be provided. At the end of this course outline there is a list of supplementary readings.

Class Format

The course will consist of a mix of synchronous and asynchronous lectures and discussion. The synchronous activities will be on MS Teams. Weekly videos of lectures will be provided through the Teams site for this course. You will also receive important information about the course via its Avenue to Learn site. Hyperlinks for each week's lecture videos will be posted on Teams in advance of that week. Students are expected to view the week's video at their convenience, but prior to the scheduled class for which it was prepared. The timeslot into which the synchronous sections will be scheduled is MWTh 4:30-5:20pm. These sessions will mainly be used for discussion involving the entire class, or discussions in break-out groups that will each involve a smaller number of students discussing a topic without the instructor, as described in more detail below.

Most weeks we will only use the Wednesday and Thursday slots for general class discussion. Students can choose to do their own research paper about a global technopolitics topic or to do a group project with an individual component.

Although the default format for this course requires students to engage in some synchronous online video communication, some students may have bandwidth, firewall, time zone or other technical complications that create problems for synchronous communication. Asynchronous alternatives or alternatives that do not involve video will be offered upon request. These alternatives may involve asynchronous discussion on Avenue or Teams.

Course Evaluation – Overview

1. **Individual profile page, 2%.** Due Wednesday September 15, midnight.
2. **Weekly quizzes on readings, 35%** of final course grade, due Tuesday by 6 pm, for each of the week's readings for which there is a quiz. There will be a quiz for each of the weeks except the first and last one (11 weeks). The best ten of eleven of your quiz grades will be averaged to calculate your overall grade for this component.

Individual research paper option

3. **Topic statement and research proposal, 10%** of final course grade. The topic statement is due Thursday September 23, midnight, and the research proposal is due Wednesday October 20, midnight.
4. **Research paper, 4000 words, 33%,** due by Monday December 6, midnight.

Group policy report option:

5. **Topic statement and research proposal, 8%** of final course grade. The topic statement is due Thursday September 23, midnight, and the research proposal is due Wednesday October 20, midnight.

6. **Research paper, 32%**, due by Monday December 6, midnight.
7. **Self-assessment of group work, 400 words, 3%**, due by Wednesday December 9, midnight.

8. **Group discussion of readings, 10%**, due through the weeks of the course.

Note: The topic statement, research proposal, and research paper can be done individually or in a policy-oriented group report, as explained further below.

Course Evaluation – Details

Individual profile page, 2%. Due Wednesday September 15, midnight.

You should create a page in the Class Notebook on Teams that introduces you to the rest of the class. You should include some commentary on your interests or relationship to the content of the course, such as why you are interested in global technopolitics. You may use any of the functionality of the Class Notebook. Your page will be viewable by all students in the course. You should be careful to not modify the profile pages of other students. A record of all editing changes on the Class Notebook, who made them, and when, is viewable by the instructor of the course.

Weekly quizzes on readings, 35% of final course grade.

These quizzes will be administered on Avenue, with the allocation of grades and timing as described above. They will have questions about the required readings for the week in which the quiz takes place. The questions may be multiple choice or other formats. You will be expected to have read the readings prior to taking the quiz. For up to three quizzes, you may substitute a short essay of up to 1000 words that summarizes and analyzes all the required readings for a week. These short essays are due at midnight, December 10. This substitution may be useful if you miss a quiz due to illness or if you got a low score on a quiz and hope to replace that grade with a higher one. The first quiz will be due at the beginning of the second week of classes, by 6 pm Tuesday September 14, and will cover material from the first and second weeks' readings. The final quiz will be due at noon on Tuesday November 30 and will cover readings for that week. The quizzes will be available for you to start answering by noon on Monday.

Note: the following describes first the individual format for the topic statement, research proposal and final paper. The policy-oriented group project option for these same three components is then described.

Individual paper option:

Topic statement and research proposal, 10% of final course grade..

For deadlines see overview section above. The topic statement is a brief summary of the topic you intend to research for your final research paper. Its purpose is to make sure you have a topic that is doable and that fits with course themes. You should

choose a topic with current relevance that involves global technopolitics. Any of the current topics discussed in the course outline, or other similar topics, are likely to be acceptable. The following should be included in your topic statement: a tentative title, the topic, how it relates to course themes, and how your paper hopes to contribute to knowledge.

The research proposal is a more developed plan for your paper. It has two main purposes. First, it aims to make sure you have a research plan that is a good one. Second, it asks you to make use of current technologies for carrying out research on themes relevant to the course. It can be up to 3 single spaced pages with regular margins and a 12-point font, not including the bibliography.

In your research proposal you should restate your topic and indicate how you hope to say something new on this topic. You should also set out your working hypothesis or arguments and indicate why these are of interest. You should give a sense of how your paper will be analytical and not just descriptive: you could develop an argument or draw on a theory, for instance. You must indicate the key developments that are relevant to your topic that have occurred **over the past two years**. You should provide evidence that you have scanned the relevant sources of information in order to ascertain the availability of information on your topic. You do this by filling out the form at the end of this outline and available in Word format on the Teams site, following the instructions in that form. The form should be submitted with the proposal. Please follow the instructions in the form. This includes finding at least 20 references, including at least two for each of the categories listed in the form, which should include at least two recent news articles obtained from LexisNexis or Google; at least two relevant documents obtained from government, business or NGOs via a Google search. You do not need to provide a list of all the material you find, nor do you need to annotate your references, but you should report on your search, and construct a bibliography using the most relevant items, indicating the source of the reference. Your research topic should have sufficient recent empirical content to allow you to discuss developments over the past two years, as indicated above. You will receive one combined grade for the topic statement and research proposal.

One research paper, 4000 words – 33%, due by Monday December 7, midnight.

Your research paper should build on your proposal. In grading the paper the following criteria will be used: (a) Is a thesis or argument clearly stated at the beginning of the paper and is the paper organized around that? (b) Does your paper address course themes? (c) Are the knowledge gaps or counter-arguments that your paper addresses identified and articulated at some point in your paper? (d) Have you drawn on the best possible scholarly and non-scholarly sources in your paper? (e) Have you brought your research up to date? (f) Is your writing clear, engaging, and adequately proofread? You do not need to include all the sources you cited in your proposal but you should be sure to use those that are most relevant.

Identifying the knowledge gaps or counter-arguments that your paper is addressing is a very useful way of showcasing the originality and importance of your paper. If there are no knowledge gaps or counter-arguments imaginable then it is likely that you have a paper that is banal and uninteresting. If you address serious knowledge gaps or challenge strong counter-arguments then your paper will be more likely to make a valuable contribution analytically. You may start to identify knowledge gaps or counter-arguments by thinking “who would be surprised by or disagree with what I’m saying, and how would they articulate this?”. This could involve a disagreement over a matter of fact or over the interpretation or analysis of facts or theories. You may find knowledge gaps or counter-arguments in the scholarly literature, or in news accounts. Ideally you will be able to quote a publication or public comment to illustrate and confirm the significance and character of the knowledge gap or counter-argument. You definitely do not need to agree with any aspect of a counter-argument—part of the purpose of identifying it is to sharpen your own arguments against it.

A purpose of theory is to link specific events, institutions, or other empirical focuses of research to more generalizable assertions about the world. As will be discussed in the course, this does not necessarily imply that it is possible to make universal generalizations that will be valid across all time and space. Nevertheless, it is generally more useful when you are writing about a particular empirical case to be able to draw lessons from it that have significance for understanding how the world works in locations beyond that case. For instance, it is great to provide insights into how a particular technology provoked political conflicts globally, but it is even more useful if this allows you to say something about the political significance of global technologies more generally. Generalization involves abstraction, and the theories we will be discussing are valuable in linking particular cases to more general understandings about global technopolitics. One valuable research design is to link your argument to one theoretical approach and the counter-argument to a different one, and then organize your paper as a contestation between these. This does not have to be a standard hypothesis-testing design. If you are more interested in policy design than theory then you may emphasize the novel practical implications of your analysis with a statement setting this novelty out rather than developing a hypothesis or argument, but you should still indicate the prevailing understandings that you are challenging, and you should still engage in analysis and not just description.

Group research project option.

Groups of 3-5 students may choose to do a group project instead of the individual topic statement, research proposal, and final paper described above. The group needs to identify a global technopolitics topic that is sufficiently complex to benefit from a division of labour in researching it. The topic should be one that involves political controversies or technological risks or uncertainty, that governmental or non-governmental policy actors would benefit from knowing more about. The group will jointly develop a plan for the research and writing of a joint report that will contribute to filling this gap in

knowledge. The final report should have individually authored sections and a jointly authored introduction and conclusion. The group should submit a joint topic statement. The research proposal should have individual components reflecting the subtopics of each group member, and a jointly authored introduction that sets out the overall plan. The segment each group member contributes individually should be 3000-3500 words. The introduction and conclusion should be a total of 2000-3000 words. Bibliographies can be as long as you wish, and are not included in the above word counts. In addition to contributing to the group report, each group member will be responsible to do a self-assessment report at the end which assesses everyone's contributions to the group project. You should read the guidance for individual research proposals and final papers for additional instructions relevant to group projects. The grades for the group report may be differentiated based on any variations in the quality of the different sections of the report and on the self-assessment reports. If the group project topic is one that is also discussed in one or more of the weeks of the course then expectations for the report will be more than for a topic that was not discussed as one of the weekly course topics. The group report should go beyond existing knowledge in some way. Some suggested topics are in Appendix A below but other topic suggestions are welcome. A group research channel on our Teams site will facilitate the finding of group members and you are welcome to post calls to form a research group there.

Group discussion of readings, 10%. Due through the course.

You will be assigned to a discussion group in Teams. Each week you will be expected to meet with your group, as break-out sessions in the regularly scheduled class time. The groups will meet via video in a Teams channel. Each student will sign up to be responsible for at least two group reports to be created on the Teams Class Notebook, each on a week's discussions of the readings. In some weeks there may be two students reporting on the week's discussions, in which case you may create a division of labour or simply produce two reports on the same discussions. Each student must also sign up to chair the group discussions for at least one week's worth of discussions. Groups that have fewer than average members (for instance if a group member has to drop the course) will be expected to produce shorter reports.

The discussion groups involve the following tasks:

- a) Identify a question or an issue from the week's readings that you would like to bring up to the class as a whole, along with a brief commentary on it. The chair is responsible to present this to the class verbally or in the Team chat in the general channel.
- b) Create a group comment on the week's readings on one or two pages of the Teams Class Notebook, due by noon Tuesday of the week following the readings you have discussed. This group comment can be in any format. These group comments will cover readings for all the weeks of the course except Week 1 and the last week of the course (Week 13). This means that the final group comment is due by noon Tuesday, December 7.

- c) Each student is expected to provide an assessment of his or her own contribution and the contributions of others in the group, looking over the whole term. This will be shared only with the instructor and will be used in assessing the grades for this component of the course. This individual assessment is due at midnight, Wednesday December 9. It should be 300-600 words. It should include some reference to the content of the discussions along with the assessment of individual contributions. If any student in your group is not mentioned in your report it will be assumed that the contribution of that student is at the average level for all the members of the group.
- d) The grades for the group readings discussion component of the course will be calculated by assessing the overall group performance, and then adjusting that grade up or down for individual scores based on individual contributions to the group performance. This procedure will account for 80% of the group discussion grade for each student. The remaining 20% of the group discussion component will be based on the quality of the individual assessment report.

Asynchronous group options.

The default option for the above group activities is synchronous communication using Microsoft Teams. Instruction on using Teams for those not familiar with it will be provided via the Avenue site for this course or links posted on that site, and from the Teams platform itself. Teams is a widely used platform in educational and work settings and it is useful to become proficient with it.

Despite the benefits of using Teams for synchronous communication in courses such as this one, some students may have technical or other difficulties with synchronous communications, due to band width, time zone, or other issues. For those students requesting asynchronous options, the above groups will be set up in an asynchronous mode in Teams channels that will not use synchronous video for group discussions, but instead use the chat and messaging functions. The group discussions for these groups are not necessarily expected to be scheduled during the regular class discussion time. Asynchronous groups may also decide to use asynchronous video if they wish. This could use platforms such as MacVideo, FlipGrid, Microsoft Stream, or others, which allow asynchronous storage and viewing of video content. Links to instructions for using such technologies will be available to groups that wish to use them.

Weekly Course Schedule and Required Readings

(for supplementary readings see Appendix B below).

Week 1. Introduction and welcome (Wed., Thurs., September 8-9)

Required readings:

Mayer, Maximilian, Mariana Carpes, and Ruth Knoblich, eds. 2014. [*The Global Politics of Science and Technology Volume 1: Concepts from International Relations and other Disciplines*](#). Berlin: Springer, introduction, pp. 2-24.

Week 2. Theorizing global technopolitics I (Sept. 15, 16)

Required readings:

Braman, Sandra. 2013. "The Meta-Technologies of Information." In [Biotechnology and Communication: The Meta-Technologies of Information](#), ed. Sandra Braman. London and New York: Routledge, 3–36.

Wajcman, J. 2010. "[Feminist Theories of Technology](#)." *Cambridge Journal of Economics* 34(1): 143–52.

McMillan Cottom, Tressie. 2020. "[Where Platform Capitalism and Racial Capitalism Meet: The Sociology of Race and Racism in the Digital Society](#)." *Sociology of Race and Ethnicity* 6(4): 441–449.

Note: Your profile page in the Class Notebook on Teams is due Wednesday September 15, midnight.

Week 3. Theorizing global technopolitics II (Sept. 22, 23)

Required readings:

Hare, Stephanie. 2016. "[For Your Eyes Only: U.S. Technology Companies, Sovereign States, and the Battle over Data Protection](#)." *Business Horizons* 59(5): 549–61.

Ebert, Hannes, and Tim Maurer. 2013. "[Contested Cyberspace and Rising Powers](#)." *Third World Quarterly* 34(6): 1054–74.

Appel, Hannah, Nikhil Anand, and Akhil Gupta. 2018. "[Introduction: Temporality, Politics, and the Promise of Infrastructure](#)." In *The Promise of Infrastructure*, eds. Nikhil Anand, Akhil Gupta, and Hannah Appel. Duke University Press, p. 1–38 [but you only need to read pp. 1-8].

Note: The topic statement is due Thursday September 23, midnight.

Week 4. Information and communications technology (Sept. 29, 30)

Required readings:

Zuboff, Shoshana. 2015. "[Big Other: Surveillance Capitalism and the Prospects of an Information Civilization](#)." *Journal of Information Technology* 30(1): 75–89.

Lessig, Lawrence. 2006. "Chapter 1: Code Is Law." In [Code: Version 2.0](#), New York: Basic Books, 1–8.

Winseck Dwayne. 2017. "[The Geopolitical Economy of the Global Internet Infrastructure](#)." *Journal of Information Policy* 7: 228–67.

Week 5. Technology, law, regulation and governance (Oct. 6, 7)

Required readings:

DeNardis, L., and A.M. Hackl. 2015. "[Internet Governance by Social Media Platforms.](#)" *Telecommunications Policy* 39(9): 761–70.

Kołodziej, Marta Katarzyna, Alberto Quintavalla, and Orlin Yalnazov. 2019. "[Who Should Regulate Disruptive Technology?](#)" *European Journal of Risk Regulation* 10(1): 4–22.

Nye, Joseph S., Jr. 2016. "Chapter 1: The Regime Complex for Managing Global Cyber Activities." In [Who Runs the Internet? The Global Multi-Stakeholder Model of Internet Governance: Research Volume Two](#), Waterloo and London: Centre for International Governance Innovation and the Royal Institute of International Affairs, 6–15.

Week 5. Reading week, no class (Oct. 11-15)

Week 6. Technology and cities (Oct. 20, 21)

Required readings:

Artyushina, Anna. 2020. "[Is Civic Data Governance the Key to Democratic Smart Cities? The Role of the Urban Data Trust in Sidewalk Toronto.](#)" *Telematics and Informatics*: 101456 [13 pages].

O’Kane, Josh. 2020. "Sidewalk Labs Scraps Smart-City Project." *Globe & Mail (Toronto, Canada)* May 8, (A4): A4. Available on Avenue.

Nielsen, Morten, and AbdouMaliq Simone. 2016. "[The generic city: Examples from Jakarta, Indonesia, and Maputo, Mozambique.](#)" In *Infrastructures and Social Complexity: A Companion*, Abingdon, Oxon ; New York, NY : Routledge, 2016.: Routledge, p. 129–140.

Sultana, Farhana. 2020. "[Embodied Intersectionalities of Urban Citizenship: Water, Infrastructure, and Gender in the Global South.](#)" *Annals of the American Association of Geographers* 110(5): 1407–1424.

Note: The research proposal is due Wednesday October 20, midnight.

Week 7. Technology, war, cybersecurity (Oct. 27, 28)

Required readings:

Bousquet, Antoine. 2018. "A Revolution in Military Affairs? Changing Technologies and Changing Practices of Warfare." In [Technology and World Politics: An Introduction](#), ed. Daniel R. McCarthy. London and New York: Routledge, 165–81. [16 pages]

Wilcox, Lauren. 2017. "[Embodying Algorithmic War: Gender, Race, and the Posthuman in Drone Warfare](#)." *Security Dialogue* 48(1): 11–28. [17 pages]

Johnson, James. 2021. "[The end of military-techno Pax Americana ? Washington's strategic responses to Chinese AI-enabled military technology](#)." *The Pacific Review* 34(3): 351–378.

Week 8. Blockchain, fintech (Nov. 3, 4)

Required readings:

Bernards, Nick. 2019. "[Tracing Mutations of Neoliberal Development Governance: 'Fintech', Failure and the Politics of Marketization](#)." *Environment and Planning A: Economy and Space* 51(7): 1442–59. [17 pages]

Allon, Fiona. 2018. "[Money after Blockchain: Gold, Decentralised Politics and the New Libertarianism](#)." *Australian Feminist Studies* 33(96): 223–243 [you can skip the sections on "The midas touch" and "Gold bugs and the new libertarianism", pp. 227-234].

Rodima-Taylor, Daivi. 2021. "[Digitalizing land administration: The geographies and temporalities of infrastructural promise](#)." *Geoforum* 122: 140–151.

Langley, Paul, and Andrew Leyshon. 2021. "[The Platform Political Economy of FinTech: Reintermediation, Consolidation and Capitalisation](#)." *New Political Economy* 26(3): 376–388.

Week 9. Technology and nature, biotechnology (Nov. 10, 11)

Required readings:

Lau, Lisa. 2018. "[A Postcolonial Framing of Indian Commercial Surrogacy: Issues, Representations, and Orientalisms](#)." *Gender, Place & Culture* 25(5): 666–85. [18 pages]

Elbe, Stefan, and Christopher Long. 2020. "[The political economy of molecules: vital epistemics, desiring machines and assemblage thinking](#)." *Review of International Political Economy* 27(1): 125–145.

Week 10. Technology, pandemics, and global health (Nov. 17, 18)

Required readings:

Kitchin, Rob. 2020. "[Civil Liberties or Public Health, or Civil Liberties and Public Health? Using Surveillance Technologies to Tackle the Spread of COVID-19.](#)" *Space and Polity*: 1–20. [20 pages]

Irwin, Aisling. 2021. "[What it will take to vaccinate the world against COVID-19.](#)" *Nature* 592(7853): 176–178.

Engebretsen, Eivind, and Ole Petter Ottersen. 2021. "[Vaccine Inequities, Intellectual Property Rights and Pathologies of Power in the Global Response to COVID-19.](#)" *International Journal of Health Policy and Management*: 1.

Gostin, Lawrence O., Suerie Moon, and Benjamin Mason Meier. 2020. "[Reimagining Global Health Governance in the Age of COVID-19.](#)" *American Journal of Public Health* 110(11): 1615–1619.

Wamsley, Dillon, and Benjamin Chin-Yee. 2021. "[COVID-19, digital health technology and the politics of the unprecedented.](#)" *Big Data & Society* 8(1): 205395172110194 (6 pages).

Week 11. Technology and the future of work (Nov. 24, 25)

Required readings:

Boix, Carles. 2019. [Democratic Capitalism at the Crossroads: Technological Change and the Future of Politics](#). Princeton: Princeton University Press, Chapter 1, Introduction, pp. 1-24. [24 pages]. [Note: our library e-version only permits one user at a time. This reading is also available on Avenue]

Anwar, Mohammad Amir, and Mark Graham. 2020. "[Between a Rock and a Hard Place: Freedom, Flexibility, Precarity and Vulnerability in the Gig Economy in Africa.](#)" *Competition & Change*: 102452942091447 [22 pages]

Spencer, David. 2017. "[Work in and beyond the Second Machine Age: The Politics of Production and Digital Technologies.](#)" *Work, Employment and Society* 31(1): 142–52. [10 pages]

Week 12. Technology and North-South issues (Dec. 1, 2)

Required readings:

Rohan Deb Roy. 2018. "Science Still Bears the Fingerprints of Colonialism," *Smithsonian Magazine*, April 9, <https://www.smithsonianmag.com/science-nature/science-bears-fingerprints-colonialism-180968709/>

Flint, Colin, and Cuiping Zhu. 2019. "[The Geopolitics of Connectivity, Cooperation, and Hegemonic Competition: The Belt and Road Initiative.](#)" *Geoforum* 99: 95–101 [6 pages].

Wiig, Alan, and Jonathan Silver. 2019. "[Turbulent presents, precarious futures: urbanization and the deployment of global infrastructure.](#)" *Regional Studies* 53(6): 912–923.

Samford, Steven. 2015. "[Innovation and public space: The developmental possibilities of regulation in the global south.](#)" *Regulation & Governance* 9 (3): 294–308. [16 pages]

Week 13. Technology, science and democracy (Dec. 7)

Optional readings:

Bannister, Frank, and Regina Connolly. 2018. "[The Fourth Power: ICT and the Role of the Administrative State in Protecting Democracy.](#)" *Information Polity* 23(3): 307–23. [16 pages]

Tufekci, Zeynep. 2017. "[Twitter, Tear Gas, Revolution. How Protest Powered by Digital Tools Is Changing the World.](#)" *Wired*. May 22, 2017. [7 pages] [A version of this article is on Avenue.

Pestre, Dominique. 2008. "[Challenges for the Democratic Management of Technoscience: Governance, Participation and the Political Today.](#)" *Science as Culture* 17(2): 101–19. [18 pages]

Beraldo, Davide, and Stefania Milan. 2019. "[From Data Politics to the Contentious Politics of Data.](#)" *Big Data & Society* 6(2): pp. 1-11

Notes: the research paper is due Monday December 6, midnight. The individual assessment of the group work (your weekly discussions, or, for those doing group research, the group research process) is due Wednesday December 9, midnight.

Course Policies

Submission of Assignments

Unless otherwise noted below, all assignments will be submitted through folders that will be available on the Avenue to Learn site for this course. Many of the components below will be carried out through Microsoft Teams. See the instructions below for further details.

Grades

Grades will be based on the grade point system from the McMaster University grading scale as illustrated below. Each quiz will be graded out of five and for the final calculation of your course grade that score will be multiplied by 2.4 to convert it into the 12-point scale. A similar conversion will be applied to the research proposal and final paper. These numerical scores are identical in value to their corresponding letter grades. If the aggregated grade point score for your overall grade for the course involves a decimal that score will be rounded to the nearest whole number and converted to the corresponding letter grade.

% MARK	LETTER GRADE	GRADE POINTS
90-100	A+	12
85-90	A	11
80-84	A-	10
77-79	B+	9
73-76	B	8
70-72	B-	7
67-69	C+	6
63-66	C	5
60-62	C-	4
57-59	D+	3
53-56	D	2
50-52	D-	1
0-49	F	0

Late Assignments

For the topic statement, research proposal, and research paper, all students have the option of an extension of up to one week of the deadline specified in the course outline above. All requests for deadline extensions longer than one week must be made in advance of the assignment's original deadline, and must be accompanied by a documented justification for why a deadline extension of longer than a week 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 failures. Assignments that are completed after the extended 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

McMaster Student Absence Form (MSAF): In the event of an absence for medical or other reasons, students should review and follow the Academic Regulation in the Undergraduate Calendar "Requests for Relief for Missed Academic Term Work".

Courses with an On-Line Element

This course will be using online technologies, including Avenue to Learn, e-mail, and Microsoft Teams. 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 on-line 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.

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., on-line search, other software, etc.). For more details about McMaster's use of Turnitin.com please go to

www.mcmaster.ca/academicintegrity.

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. **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](#), 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.

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.

Appendix A: Some possible research topics

- 5G: how should governments manage the challenges?
- Artificial intelligence: how should governments regulate AI globally?
- Automated weapons: how should they be regulated?
- Automation and job loss: how can governments manage the threat of job loss from automation?
- Break up big tech: should dominant firms be broken up?
- Cleantech: is technology a solution or distraction for environmental problems?
- Cybersecurity: can global agreement on cybersecurity rules be achieved?
- Democratic technology alliance: should democracies coordinate their technology efforts against authoritarian governments?
- Digital currencies: should central banks create digital currencies? Should cryptocurrencies be promoted, regulated, or banned?
- Digital democracy: What can experiments with digitized democracy such as those tried by Five Star Movement, Podemos, or the Pirate Party tell us?
- Digital farming: do new digital technologies benefit farmers or exploit them?
- E-learning: Should governments promote the digitization of education?
- E-waste: what should governments do about the global problem of e-waste?
- Facial recognition: what restrictions should be placed on it?
- Global digital divide: how can this be addressed?
- Human trafficking and technology: how does technology contribute to or work to combat human trafficking?
- Intellectual property rights: what's the appropriate balance between rewarding innovation and creating exploitative monopolies in knowledge?
- Nanotechnology: how should the risks be regulated?
- Open banking: should the Canadian and other governments promote easier access to customer bank data to promote innovation and competition?
- Platform content moderation: what's the appropriate balance between freedom of expression and protection against hate and misinformation?
- Racism and technology: how can algorithmic and other forms of racial bias in technology be addressed?
- Scaling up Canadian tech start ups: Canada generates lots of tech innovations but has difficulty scaling up to create big successful Canadian tech firms. What can governments do about this?
- Small modular nuclear reactors: are these a solution to climate change or another hazardous technology?
- Supply chain vulnerabilities: the pandemic highlighted the risks of global supply chains. How does technology contribute to or solve this problem?
- Trust in science: backlashes against experts and misinformation ("infodemics") have complicated the relationship between people and technologies.
- Vaccine nationalism and inequalities: the pandemic has revealed the inequalities and vulnerabilities associated with vaccine production and availability.
- Virus research: should labs such as the Wuhan Institute of Virology explore new viruses in animals and birds?

Appendix B: Supplementary Readings

Theorizing global technopolitics I & II

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Appendix C: Research Proposal Form

Student Name:

Instructions: This form is to allow you to show that you consulted all the required electronic sources. You should include at least 20 references in your bibliography, including at least two for each of the categories listed in the form below, which should include at least two recent news articles obtained from LexisNexis or Google and at least two relevant documents obtained from government, business or NGOs via a Google search. In cases where your search did not turn up relevant references you should provide your search terms and any other brief relevant commentary under “Comments” to show that you did the search. You should use some numbering system so that you can make clear for each source which items in your bibliography were found using it. For instance, you could number all the items in your bibliography and you could use those numbers in this form to show that you did the search successfully. You are not expected to read or obtain all the references listed here. Part of the goal of this assignment is to provide a report on the state of the knowledge in the field and a list of relevant materials can help address that goal. If the publication looks especially useful and is not available at McMaster University, then it may be worth ordering through RACER (Inter-Library Loan).

Sources	Examined? (Y or N)	Reference Numbers	Comments
Nexis Uni News			
Nexis Uni Law Reviews*			
Social Sciences Citation Index, ABI/INFORM, or comparable databases			
Google Search (not Google Scholar)			
NGO and public sector websites			

**Note: it is important to make sure you search the law reviews. These may come up from a regular search. The Nexis Uni database changes its format and name from time to time, but you should be able to access it as one of the data bases accessible from the main library webpage. Be sure you access both the news archive and the law review archive.*