SELECTED POLITICAL PROBLEMS I: POLITICS OF TECHNOLOGY
POLSCI 780
Term 2, Winter 2019

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Seminar: Tuesdays, 11:30 am-2:20 pm
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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 two 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 https://docs.google.com/spreadsheets/d/1EOLB2LsL2WWQcII-3yi-HQB16ajiXhAoMVvLTO4c 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.

Discussant papers should be e-mailed to the instructor by 5 p.m. EST the day prior to the corresponding seminar. 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 https://docs.google.com/spreadsheets/d/1EOLB2LsL2WWQcII-3yi-HQB16ajhXFhAoMVvLTEO4c 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:


Other Readings:


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**Week 3 (Jan 22) Technological Determinism**

**Key Readings:**


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:


**Week 4 (Jan 29) Architectures of Control**

Key Readings:


Other readings:


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

Key Readings:


Other Readings:


**Week 6 (Feb 12) Political Economy of Technology**

Key Readings:


Other readings:


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

Week 8 (Feb 26) Technology and Public Policy
Key Readings:


Other Readings:


Executive Office of the President of the United States of America and National Science and Technology Council Committee on Technology. *Preparing for the Future of Artificial Intelligence*. White House Office of Science and Technology Policy (2016).


**Week 9 (Mar 5) Technology and Civil Society**

Key Readings:


Other Readings:


**Week 10 (Mar 12) Technology, Democracy, and Citizenship**

Key Readings:


Other Readings:


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

Key Readings:


Other Readings:


Week 12 (Mar 26) Technology and Warfare

Key Readings:


Other Readings:


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]


Other Readings:


Gurumurthy, Anita and Nandini Chami. Digital Technologies and Gender Justice in India: An analysis of key policy and programming concerns (Submission to


**Week 14 (Apr 9) Algorithmic Bias and Accountability**

**Readings:**


**Other Readings:**

Angwin, Julia, Jeff Larson, Surya Mattu, and Lauren Kirchner, “Machine Bias: There’s software used across the country to predict future criminals. And it’s biased against blacks,” *Propublica* (May 2016).


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:

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<th>GRADE</th>
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<tr>
<td>90-100</td>
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<td>80-84</td>
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<td>B</td>
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<td>70-72</td>
<td>B-</td>
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<td>F</td>
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Late Assignments
All requests for deadline extensions must be made in advance of the assignment’s original deadline, and must be accompanied by a documented justification for why a deadline extension is needed. Challenges such as clustering of assignments or final presentations in other courses that were announced earlier in the term should be anticipated and planned for. It is your responsibility to make contingency plans for unforeseen problems such as computer and car failures. Assignments that are completed after the deadline, if accepted, will be penalized by one grade point per day including Saturday and Sunday (a grade point is the interval between A+ and A, A and A-, etc.).

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

Avenue to Learn
In this course we will be using Avenue to Learn. Students should be aware that, when they access the electronic components of this course, private information such as first and last names, user names for the McMaster e-mail accounts, and program affiliation may become apparent to all other students in the same course. The available information is dependent on the technology used. Continuation in this course will be deemed consent to this disclosure. If you have any questions or concerns about such disclosure please discuss this with the course instructor.
Turnitin.com
In this course we will be using a web-based service (Turnitin.com) to reveal plagiarism. Students will be expected to submit their work electronically to Turnitin.com and in hard copy so that it can be checked for academic dishonesty. Students who do not wish to submit their work to Turnitin.com must still submit a copy to the instructor. No penalty will be assigned to a student who does not submit work to Turnitin.com. All submitted work is subject to normal verification that standards of academic integrity have been upheld (e.g., on-line search, etc.). To see the Turnitin.com Policy, please go to the Office of Academic Integrity.

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 Academic Integrity Policy.

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 sas@mcmaster.ca. 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 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.