Course Code: **PSCI 384**

**Technology and International Politics**

**Academic Year and Term:** 2020-2021 Fall Semester

**Lectures:** Online

<table>
<thead>
<tr>
<th>Dr. Alexander Lanoszka</th>
<th>Evaluation Criteria:</th>
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<tbody>
<tr>
<td><a href="mailto:alexander.lanoszka@uwaterloo.ca">alexander.lanoszka@uwaterloo.ca</a></td>
<td>15% Participation</td>
</tr>
<tr>
<td>Virtual Office Hours: W 13:00-15:00 EDT</td>
<td>20% Take-Home Midterm</td>
</tr>
<tr>
<td>WebEx link given below</td>
<td>30% Technology Futures Paper</td>
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<tr>
<td></td>
<td>35% Take-Home Final</td>
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**Course Description**

This course examines the relationship between technology and international security, with a focus on how technologies have altered political organization, economic development, national security strategies and military competition. Case studies may include chariots, motorized armour, aircraft, nuclear weapons, surface ships, autonomous weapons, cyber-security, biotechnology, and new media.

**Pedagogical Approach**

This course will comprises eleven modules, which in turn consist of lectures, supported by PowerPoint presentations made available to students divided in 10-15 minutes chunks. These modules will appear roughly on a weekly basis, and should be entirely uploaded by the Thursday. Audio-only recordings are also available to accommodate some variation in students’ preferences and needs. Students are responsible for keeping up-to-date with the lecture readings and are encouraged to participate actively in discussion boards in a respectful and constructive manner.

For my part, I promise to provide students with the tools necessary to succeed academically whether it is by giving them clear requirements for assignments or by
giving them detailed and timely feedback. I will try to interact with students participating in discussion boards as much as possible within reason. Doing so helps students develop a grasp of the lecture’s material and the readings assigned for that ‘module’. It will also give them an opportunity to ask questions that they might have, whether with respect to my lecture, to the assigned readings, or to current events that may be relevant that week. I must emphasize that if you are confused about something, then at least one of your classmates shares the same confusion. As such, do not hesitate to ask questions.

Finally, you will notice that for each module I have a set of links under the subheading “Media.” These are not mandatory to watch or to listen. Nevertheless, I believe that these multimedia (podcasts, YouTube videos, etc.) can be of complimentary value to the material that make up the module. I will add or suggest more as I find them over the course of the term.

Assessment

A course taught online by necessity has to balance between retaining students’ active engagement and making sure the work burden does not become too onerous. I do not want to give you “busy work” just for its own sake. I am cutting down the assignments to three major ones. However, I hope that discussion boards will see a robust level of activity over the course of the term.

15% Participation

I expect students to participate in discussions regarding the class material and weekly readings. As such, I will evaluate students based on the frequency and quality of their interventions. Students will receive something between 11 and 15 if they make an intervention in the discussion board at least two-thirds of the modules. The quality of the intervention also matters such that, contrary to Joseph Stalin, quantity does not have a quality all of its own. Indeed, any attempt to dominate or to shut down discussion will result in a subtraction of your grades. Students will receive 6-10 if they do not post on most weeks and/or have sporadic interventions over the course of the term. Students will receive 1-5 if they fail to post on the discussion board often and remain silent over the course of the term. You have to be a complete no-show to get 0.
20% Take-Home Midterm (5 pages)

This take-home midterm, due 16 October 2020 at 23:59 EST, will be based on the course material drawn from modules 1-5. I expect that students will reference at least some of the readings from those days in answering any question asked of them. The midterm exam will be given one week before the deadline. I do expect proper referencing and adherence to the essay formatting guidelines listed below.

35% Technological Futures Paper (8-9 pages)

For this paper, you will choose one technology from the list below and write an essay on how that technology will impact politics. To help organize your thoughts, here is a list of questions that can help frame your discussion. Some of these questions overlap and may even be restatements.

- Are there existing technologies that are similar? If so, was the emergence of that technology a difference in degree or of type? What can be learned from that historical experience?

- Are there groups within society that would benefit the most from adopting or acquiring this technology? Are there any losers?

- What would be the effect on political organisation? Would it lead to greater centralization of political control? Or would it lead to decentralization? In whose authority and at what scale (local to planetary)?

- Would this technology be good for democracy or for autocracy?

- If applicable, what are some countermeasures that losers or adversaries might adopt in response?

- What ethical or moral issues attend the introduction and/or incorporation of this new technology? What new standards of behavior would emerge, if any?

- What would be impact of this technology on economic production and consumption? What distributional consequences would this technology have?
- How will this technology affect military strategy and/or military alliances?

- Will this technology reward cooperation or encourage conflict?

Technologies for consideration:

- Transporter (*Star Trek*)
- Holodeck (*Star Trek*)
- Replicator (*Star Trek*)
- Cloaking device (*Star Trek*)
- Universal translator (*Star Trek*)
- Replicant (*Blade Runner*)
- Cylon (*Battlestar Galactica*)
- Cloning (*Orphan Black*)
- Cybernetics (*Star Wars*)
- Sentient computing (*2001: A Space Odyssey*)
- Subconscious infiltration (*Inception*)

Be sure to define your terms and to use proper referencing, in addition to following the guidelines below. A strong essay will draw on the concepts covered in class as well as lean on extensive research. Because these technologies remain (largely) in the realm of science fiction, I understand that there is no direct historical evidence here. Nevertheless, you can rely on analogical reasoning and use historical examples to substantiate your conjectures. Exemplary essays from the last time I taught this course are available so that you can have a better sense of how a strong essay looks.

**30% Take-Home Final (7-8 pages)**

This take-home final due at 23:59 EST, 4 December 2020, will be based on the course material drawn from modules 6 through 11. Students must reference at least some of the readings from those days in answering any question asked of them. The final exam will be given one week before the deadline. I do expect proper referencing and adherence to the essay formatting guidelines listed below.
Essay Formatting and Late Policy

Other rules governing the formatting of all written work submitted for this course:

• 1” margins all around
• 12 pt font
• Page numbers—if your first page is the cover page, then set this page number to 0. (In Word, select “Page Numbers” from the “Insert” menu and click on “Format.”)
• Consistent usage of one standard citation style (e.g., Chicago, MLA, etc.)
• A standard cover page that includes the word count
• All written work MUST be submitted in .doc or .docx format. NO PDFS!

Failure to format your essay properly will result in a deduction of your mark.

Failure to submit your written assignment before the deadline (23:59 EST of the scheduled date) will result in a 10% deduction of your mark on the assignment per day. This rule applies to all written work. No exceptions.

Office Hours

Virtual office hours are on Wednesdays, from 13:00 to 15:00 EDT on WebEx. Copy and paste the link below into your browser. You may be asked to download Webex.pkg in order to get started. Please note that there may be a queue.

Link: https://uwaterloo.webex.com/uwaterloo/j.php?
MTID=m8a574c3d0039d18fdd407d6699966c90

Password: 5XJd645ZA5T

Letter Writing Requests

Absolutely DO NOT put my name down as a reference without asking for my permission first. I strongly encourage all students contemplating further postgraduate studies to consult with me first. Please note that I have very specific guidelines about letter writing. Read the document first before approaching me. Doing so will save everyone time and energy.
Email Confirmation and Communication

Once you have read through this syllabus, please send me an email with subject line “PSCI 384: Syllabus Read”. In this email, state your name, your reasons for enrolling in this course, and previous courses that may be relevant. The email should be no longer than four sentences.

Please note that all emails sent to me should include “PSCI 384” at the beginning of the subject line. Responses could take up to 1-2 business days (no weekends). If I believe that answering your email would take me more than five minutes to do, then I would invite you to meet me during my office hours instead. If you have not received a response after 2 business days, then please resend your email. I will ONLY respond to emails that are sent from your uwaterloo.ca account.

Twitter

I often tweet on issues relating to European security and U.S. alliance politics, with much focus on military power. During the term I might tweet relevant articles that bear directly on the issues raised in this course. Tweeted articles are not required reading. I am indifferent as to whether you follow me on Twitter.

Academic Integrity

In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility.

(a) **Discipline:** A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for her/his actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 - Student
Discipline. For information on categories of offences and types of penalties, students should refer to Policy 71 - Student Discipline at http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm.

(b) **Grievance:** A student who believes that a decision affecting some aspect of her/his university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70 - Student Petitions and Grievances, Section 4 at http://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm.

(c) **Appeals:** A student may appeal the finding and/or penalty in a decision made under Policy 70 - Student Petitions and Grievances (other than regarding a petition) or Policy 71 - Student Discipline if a ground for an appeal can be established. Read Policy 72 - Student Appeals, http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm See also: Student Appeals at https://uwaterloo.ca/arts/current-undergraduates/student-support/artsundergraduate-office.

(d) **Turnitin.com:** Plagiarism detection software (Turnitin) will be used to screen assignments in this course. This step serves to verify that use of all material and sources in assignments is documented. In the first week of the term, details will be provided about the arrangements for the use of Turnitin in this course. If you do not wish to have your assignments submitted to Turnitin, an alternative arrangement between you and I can be worked out where your work can still be rigorously assessed to ensure its academic integrity.

**Accommodation for Students with Disabilities**

The AccessAbility Services (AS) Office collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AS Office at the beginning of each academic term.

**NOTA BENE: THIS SYLLABUS IS SUBJECT TO MINOR CHANGES. PLEASE REFER TO THE LEARN WEBSITE FOR THE MOST UP-TO-DATE VERSION.**
# Course Schedule and Reading List

<table>
<thead>
<tr>
<th>SCHEDULE</th>
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| **Module 1**  
Week of 8 September | 1. Introduction  
2. The Horse |
| **Module 2**  
“ ” of 15 September | 3. Knights  
4. Samurai |
| **Module 3**  
“ ” of 22 September | 5. The Military Revolution  
6. Fortifications |
| **Module 4**  
“ ” of 29 September | 7. The Great Divergence |
| **Module 5**  
“ ” of 6 October | 8. Industrialisation  
9. Nationalism |
| **“Take-Home” Midterm Due 16 October at 23:59 EDT** |
| **Module 6**  
“ ” of 20 October | 10. The Modern System  
11. The Army and Civil-Military Relations |
| **Module 7**  
“ ” of 27 October | 12. Sea Power  
13. Air Power |
| **Module 8**  
“ ” of 3 November | 14. Nuclear Weapons  
15. Nuclear Arms Control |
| **Technology Futures Paper Due 6 November at 23:59 EST** |
| **Module 9**  
“ ” of 10 November | 16. Asymmetric Warfare |
| **Module 10**  
“ ” of 17 November | 17. The Internet  
18. Disinformation Campaigns |
| **Module 11**  
“ ” of 24 November | 19. Artificial Intelligence  
20. Unmanned Systems  
21. Quantum Computing |
| **“Take-Home” Final Due 4 December at 23:59 EST** |
MODULE 1

1. Introduction

Required Readings:

Recommended Readings:

2. The Horse

Required Readings:


Recommended Readings:

Media:


MODULE 2

3. Knights

*Required Readings:*


*Recommended Readings:*


4. Samurai

*Required Readings:*


*Recommended Readings:*


**Media:**

Historians usually tie the beginning of the Roman Empire’s decline to the death of Emperor Marcus Aurelius and the subsequent reign of his son Commodus. The six-episode first season of Roman Empire (called “Reign of Blood”) is a solid portrayal of Commodus’s life history. See [https://www.netflix.com/ca/title/80096545](https://www.netflix.com/ca/title/80096545).


MODULE 3

5. Military Revolution

Required Readings:


Recommended Readings:


6. Fortifications

Required Readings:


Recommended Readings:


Media:


“How to Take a Medieval Castle | Animated History,” *English Heritage*, YouTube, 7 June 2017, https://www.youtube.com/watch?v=xNeNPk4D_Ng.

MODULE 4

7. The Great Divergence

Required Readings:


Read comment by Joel Mokyr, 314-321 attached to Clark and Feenstra reading.


Recommended Readings:


Media:

MODULE 6

8. Industrialisation

Required Readings:


Recommended Readings:


9. Nationalisation

Required Readings:


Recommended Readings:


Media:

“The Industrial Revolution (18-19th Century),” Simple History, YouTube, 1 October 2017, https://www.youtube.com/watch?v=xLhNP0qp38Q.


MODULE 7

10. Land Power

Required Readings:


Recommended Readings:


Jon Lindsay and Erik Gartzke, “Politics by Many Other Means: The Comparative Strategic Advantages of Operational Domains,” Journal of Strategic Studies, 1-34.

11. The Army and Civil-Military Relations

Required Readings:


Recommended Readings:


*Media:*


MODULE 8

12. Sea Power

Required Readings:


Recommended Readings:


13. Air Power

Required Readings:


**Recommended Readings:**


**Media:**


“NATO Maritime Power - Securing the Seas,” *NATO*, YouTube, 10 July 2016, [https://www.youtube.com/watch?v=0u27-sJ_OJ0](https://www.youtube.com/watch?v=0u27-sJ_OJ0).
MODULE 9

14. Nuclear Weapons

Required Readings:


Recommended:


15. Nuclear Arms Control

Required Readings:


**Recommended Readings:**


**Media:**
MODULE 10

16. Insurgency and Terrorism

Required Readings:


Recommended Readings:


*Media:*
MODULE 11

17. The Internet

Required Readings:


Recommended Readings:


18. Disinformation Campaigns

Required Readings:


**Recommended Readings:**


**Media:**

Any major election.

**MODULE 11**

**19. Artificial Intelligence**

**Required Readings:**


**Recommended Readings:**


20. Unmanned Systems

**Required Readings:**


**Recommended Readings:**


21. Quantum Computing

**Required Reading:**


**Recommended Reading:**


**Media:**


