

POLITICAL SCIENCE 3395G (550) Human Rights, Artificial Intelligence and Cybersecurity Winter, 2022

Course delivery with respect to the COVID-19 pandemic

Although the intent is for this course to be delivered in-person, the changing COVID-19 landscape may necessitate some or all of the course to be delivered online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). The grading scheme will not change. Any assessments affected will be conducted online as determined by the course instructor.

1. Course Information

Course Name, Number, Section: Political Science 3395G, Section 550

Instructor(s): Dr. Laszlo Sarkany

Contact Information: lsarkan@uwo.ca

Office: Lucas Annex, Apps House, HUC

Office Hours: Mondays, 11:30am - 2:30pm, Wednesdays, 11:45am - 2:45pm

Class Location: HC-W106

Scheduled Class Times (including lab or tutorial hours): Fridays, 10:30am - 12:30pm

Prerequisites/ Antirequisites: Enrolment in 3rd or 4th year in any Political Science module, or permission of the Department.

2. Course Description

The aim of this course is to introduce students to critical social issues at the intersection of human rights, artificial intelligence, and cyberwarfare. The emphasis in this course will be on understanding how 'actual' artificial intelligent systems impact such critical aspects of human rights as privacy, discrimination, inclusion, transparency and accountability. Emphasis will further be placed on the nature and phenomenon of cyberwarfare, and the challenges of governing cyberspace. Key questions that will animate our discussion this term will be the following: should artificial algorithmic systems, not only remember our names and tell us what the weather is like outside, but also decide – without human input – who should be hired in the public and private sectors, what social services should be available to what groups in society, and when weapons should fire and at what targets – and did we mention, do all this without any human input? With regards to cyberspace and cyberwar, what is cyberwar,

how is it fought, how can we defend against it, and to what extent is it different from conventional warfare? Finally, what are the challenges of regulating and governing cyberspace?

- 3. Course Learning Outcomes By enrolling in this course, students will:
 - a. Develop a thorough understanding of (the non-technological) aspects of artificial intelligence and cybersecurity, and how they relate to social justice and international relations
 - b. Understand the key links between AI and a range of key human rights issues such as privacy and democratic governance
 - c. Understand the phenomenon of cyber conflict and warfare, and how international relations scholars have attempted to make sense of this new/old phenomenon
 - d. Critically evaluate existing policy approaches to regulation of AI and cybersecurity
 - e. Evaluate the challenges of governing cyberspace

4. Textbooks and Course Materials

Required Textbooks:

Kaplan, Jerry. (2016). *Artificial Intelligence: What Everyone Needs to Know*. New York: Oxford University Press. (Also available on Kindle as well.)

P.W. Singer and Allan Friedman, <u>'Cybersecurity and Cyberwar: What Everyone Needs to Know.'</u> Oxford University Press; 2014.

*******The rest of the readings assigned are accessible on-line in the appropriate journals on on-line sources, which are further available electronically through UWO library web page.

Further Resource:

Niezen, Ronald. <u>'#HumanRights : The Technologies and Politics of Justice Claims in Practice'</u>, Stanford University Press, 2020. (Available online via the website of the UWO library: <u>http://ebookcentral-proquest-com.proxy1.lib.uwo.ca/lib/west/detail.action?docID=6199687</u>

5. Methods of Evaluation

GRADING	VALUE	DUE DATE
Class participation	15%	Ongoing
Seminar presentation	20%	Ongoing; decided during the second week of class
Essay proposal presentation	20%	March 11 th , 2022 on OWL
Essay proposal submission	15%	March 18 th , 2022 on OWL
Class Essay	30%	April 8 th , 2022 on OWL

METHODS OF EVALUATION AND ASSESSMENT

I) IN-CLASS PARTICIPATION

You are expected to participate during each of the lectures and meetings by asking question and providing unique and multifaceted insight into the readings. Each of the lectures and meetings will last 2 hours. During the first hour a seminar presentation will be held, and the instructor will lecture on the particular topics discussed. During the remaining 60 minutes the students will be able to ask questions of the presenters or the instructor:

- Verbally, and in person
- By posting questions and comments on the discussion forum created each week during the term. The discussion forum will be available on OWL.

Overall, participation should reflect awareness of the main arguments in the readings, and should be informed. <u>Please note that the frequency of participation will not be considered as having the same value as the quality of participation</u>.

Discussions regarding artificial intelligence, human rights and cybersecurity may lend themselves to multi-faceted discussions involving a variety of view points and opinions, which may – or may not – be shared by all. Therefore, students are asked that they conduct themselves in such a way that they show the utmost respect to other who may – or may not – share their views. The key here is to respect each others' opinions and perspectives. Any student uttering any negative or derogatory comments towards the views of others will first be asked to change their behaviour, or will be asked to take a few-minute break from the discussion.

***Please note that attendance will be taken at the beginning of each class. As per department policy, two absences for personal and confidential reasons will be accommodated.

II) SEMINAR PRESENTATION

A group of 2—3 student will provide a 20 - 25-minute presentation on <u>at least three (3)</u> of the assigned readings for a particular week. We will decide on the order of presentation on the second day of the lectures.

The presentation will be followed by a 5 to 10 minute 'question and answer' period. During this time, the presenters will be able to answer any clarifying questions

Please note that you are more than welcome to go above and beyond the reading list provided below. For some of the weeks, you will in fact be required to select your own reading.

Presentations should include the following:

i)	Selecting two key (2) questions which will guide the overall presentation	10%
ii)	Summary of the main arguments in the readings	30%
iii)	Analysis of the strengths and weaknesses of the arguments	30%
iv)	Offering at least two to three key questions for further discussion	20%

III) PROPOSAL PRESENTATION, AND SUBMISSION March 11th and 18th, 2022 at 11:59PM

On March 4th, you will be asked to conduct a presentation on the topic you choose to explore in your class essay. The presentation should follow the same guidelines as the seminar presentation however, this presentation should only be about 5-7 or so minutes long. Following the presentation, the presenters will be able to answer questions about their work posed by their colleagues and the instructor.

In preparation for the class essay, then, students will be asked to submit a 750-word essay proposal not later than a week after the above-mentioned presentation, or on March 11th, 2022. Students should incorporate in the written proposal the comments, advice and suggestions received from their colleagues and the course instructor.

The components of the proposal will be as follows. (You MUST use the format outlined below.):

Section I – <u>'Research Question(s)'</u> – maximum three questions should be posed, and they should all <u>*closely*</u> relate to the central topic of the essay.

Section II – <u>'Introduction'</u> – no longer than 250 words – which must include a clearly identifiable thesis statement.

Section III – Listing of all of the subsections of the essay, entitled 'Section 1 – Section 'n'. Under each subsection, there needs to be a sentence or two describing the themes/topics/arguments/cases discussed. **Section IV** – <u>'Conclusion'</u>, which will include a brief summary of the arguments.

IV) MAJOR RESEARCH ESSAY

April 8th, 2022

You will be responsible for writing a <u>class essay</u> worth 30% of the final mark. The essay will be due on the last day of classes during the fall term. The essay should be 10-12 double spaced pages long, on a topic agreed to by the student and the instructor no later than November 1^{st} .

***Students are highly encouraged to write the class essay on a topic discussed either during their seminar presentations, or while commenting on a seminar presentation.

- i) Formatting should be as follows: Size 12, Times New Roman font, with 1" 1.25" margins. I will accept Chicago style, the Modern Languages Association (MLA) style, and the American Psychological Association (APA) style formatting of footnotes, endnotes, in-text referencing, bibliography, etc.
- ii) In regards to the sources used for the essays, please note the following order:
 - a. Books
 - b. Journal articles
 - c. Policy papers
 - d. Discussions in the media with wide readership approximately 500,000 readers and above
- iii) You are asked to consult and cite at least 10–12 sources.
- i) Extensions will only be granted on compassionate grounds, and only if I am notified in writing of your circumstance.
- With respect to the topic of the essay, it will be your responsibility to contact me about your topic.
 If you choose not to do so, I reserve the right to directly criticize the topic of the essay, which will most certainly have an impact on the mark you achieve in the course.

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com *http://www.turnitin.com*

*** Each assignment/paper is due on the date noted. Late assignments will automatically receive a grade of zero unless there are extenuating circumstances such as illness or personal emergency (documentation is required). Extensions may be granted in instances where illness, personal or family emergency, or mental health issues are a factor, though waiting until after the deadline to see an academic counsellor will increase the possibility that you will receive zero.

As a final note, students are strongly encouraged to take advantage of the instructor's office hours to discuss course readings and lectures, or exam performance.

WEEKLY READING ASSIGNMENTS:

WEEK 1, JANUARY 14th - Introduction

Latonero, *AI and Upholding Human Rights* (video) https://events.technologyreview.com/video/watch/mark-latonero-ai-human-rights/

WEEK 2, JANUARY 21st - A Primer on Human Rights and What is AI

Kaplan, section 1

Kamphorst, "The primacy of human autonomy: Understanding agent rights through the human rights." Available at <u>http://ceur-ws.org/Vol-885/paper3.pdf</u>

Risse, M. "Human rights and artificial intelligence: An urgently needed Agenda." *Human Rights Quarterly*, vol. 41, no. 1, 2019, pp. 1 – 16. [UWO library] "Universal Declaration of Human Rights," available at <u>https://www.un.org/en/universal-declaration-human-rights/index.html</u>

WEEK 3, JANUARY 28th - The Evolution of AI and the Edge of Knowledge in the Field Kaplan, section 2 and 3

Liu, "The power structure of artificial intelligence." *Law, Innovation and Technology*, vol. 10, no. 2, pp. 197–229. [OWL]

Hoy, "Emerging scientific technologies help defend human rights." *Science*, vol. 361, no. 6405, pp. 859-860. [OWL]

WEEK 4, FEBRUARY 4TH – AI and Privacy

Buttarelli. "Privacy matters: updating human rights for the digital society." *Health and Technology*, vol. 7, no. 4, pp. 325 – 328. [OWL]

Kayaalp. "Patient privacy in the era of big data." Balkan Medical Journal, vol. 35, no. 1, pp. 8 – 17. [OWL]

WEEK 5,- FEBRUARY 11TH - AI and Democracy

Nemitz. "Constitutional democracy and technology in the age of artificial intelligence." *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, vol. 376, no. 2133. [OWL]

"Will Democracy Survive Big Data and Artificial Intelligence?" available at <u>https://www.scientificamerican.com/article/will-democracy-survive-big-data-and-artificial-intelligence/</u>

WEEK 6, FEBRUARY 18TH – AI and the Public Sector

Bundin, et. al. "Legal aspects of the use of ai in public sector." *Communications in Computer and Information Science*, vol. 858, pp. 171 – 180. [OWL]

McKelvey and McDona. "Artificial intelligence policy innovations at the Canadian federal government." *Canadian Journal of Communication*, Vol. 44, no. 2, pp. 43 – 50. [OWL]

***READING WEEK – FEBRUARY 21ST– 25TH ***

WEEK 7, MARCH 4TH - SECURITY: IT'S NUTS AND BOLTS

Singer and Friedman, Part I, section 1, 2 and 3

WEEK 8, MARCH 11TH – CYBERSECURITY: IT'S NUTS AND BOLTS, PART II

Singer and Friedman, Part I, sections 4, 7, 13 and 14

WEEK 9, MARCH 18TH – CYBERSECURITY AND CYBERCRIME PART I

Singer and Friedman, Part II, sections 1, 2 3 and the focus on 'Anonymous'

Wilner. "Cybersecurity and its discontents: Artificial intelligence, the internet of things, and digital misinformation." *International Journal*, vol. 73, no. 2, pp. 308 – 316. [OWL]

WEEK 10, MARCH 25TH – CYBERSECURITY AND CYBERCRIME PART II

Singer and Friedman, Part II, sections 5, 6, 7, 8

WEEK 11, APRIL 1ST – CYBERWAR, PART I

Singer and Freidman, Part II, sections 13, 14, 15, and 16

WEEK 12, ARPIL 8TH – CYBERWAR PART II

Singer and Friedman, Part II, sections 17, 18, 19, 20 and 23

Ashrafian. "Artificial Intelligence and Robot Responsibilities: Innovating Beyond Rights." *Science and Engineering Ethics*, vol. 21, no. 2, pp. 317 – 326. [OWL]

Kaplan, section 8

Livingston and Risse. "The Future Impact of Artificial Intelligence on Humans and Human Rights." Ethics and International Affairs, vol. 33, no. 2, pp. 141–158. [OWL]

Additional sources: <u>https://events.technologyreview.com/video/?topic=intelligent-machines</u> <u>https://ai-hr.cyber.harvard.edu/</u>



Appendix to Course Outlines: Academic Policies & Regulations 2021 - 2022

Prerequisite and Antirequisite Information

Students are responsible for ensuring that they have successfully completed all course prerequisites and that they have not completed any course antirequisites.Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

Pandemic Contingency

In the event of a COVID-19 resurgence during the course that necessitates the course delivery moving away from face-toface interaction, all remaining course content will be delivered entirely online, typically using a combination of synchronous instruction (i.e., at the times indicated in the timetable) and asynchronous material (e.g., posted on OWL for students to view at their convenience). Any remaining assessments will also be conducted online at the discretion of the course instructor. In the unlikely event that changes to the grading scheme are necessary, these changes will be clearly communicated as soon as possible.

Student Code of Conduct

Membership in the community of Huron University College and Western University implies acceptance by every student of the principle of respect for the rights, responsibilities, dignity and well-being of others and a readiness to support an environment conducive to the intellectual and personal growth of all who study, work and live within it. Upon registration, students assume the responsibilities that such registration entails. While in the physical or online classroom, students are expected to behave in a manner that supports the learning environment of others. Please review the Student Code of Conduct at: https://huronatwestern.ca/sites/default/files/Res%20Life/Student%20Code%20of%20Conduct%20-%20Revised%20September%202019.pdf.

Attendance Regulations for Examinations

A student is entitled to be examined in courses in which registration is maintained, subject to the following limitations:

- 1) A student may be debarred from writing the final examination for failure to maintain satisfactory academic standing throughout the year.
- 2) Any student who, in the opinion of the instructor, is absent too frequently from class or laboratory periods in any course will be reported to the Dean of the Faculty offering the course (after due warning has been given). On the recommendation of the Department concerned, and with the permission of the Dean of that Faculty, the student will be debarred from taking the regular examination in the course. The Dean of the Faculty offering the course will communicate that decision to the Dean of the Faculty of registration.

Review the policy on Attendance Regulations for Examinations here: <u>https://www.uwo.ca/univsec/pdf/academic_policies/exam/attendance.pdf</u>.

Statement on Academic Offences

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following website:

<u>https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf</u>. The appeals process is also outlined in this policy as well as more generally at the following website:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/appealsundergrad.pdf.

Turnitin.com

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (http://www.turnitin.com).

Statement on Use of Electronic Devices

It is not appropriate to use electronic devices (such as, but not limited to, laptops, cell phones) in the classroom for nonclassroom activities. Such activity is disruptive and distracting to other students and to the instructor, and can inhibit learning. Students are expected to respect the classroom environment and to refrain from inappropriate use of technology and other electronic devices in class.

Statement on Use of Personal Response Systems ("Clickers")

Personal Response Systems ("clickers") may be used in some classes. If clickers are to be used in a class, it is the responsibility of the student to ensure that the device is activated and functional. Students must see their instructor if they have any concerns about whether the clicker is malfunctioning. Students must use only their own clicker. If clicker records are used to compute a portion of the course grade:

- the use of somebody else's clicker in class constitutes a scholastic offence
- the possession of a clicker belonging to another student will be interpreted as an attempt to commit a scholastic offence.

Academic Consideration for Missed Work

Students who are seeking academic consideration for missed work during the semester may submit a self-reported absence form online provided that the absence is **48 hours or less** and the other conditions specified in the Senate policy at

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_illness.pdf are met.

Students whose absences are expected to last **longer than 48 hours**, or where the other conditions detailed in the policy are not met (e.g., work is worth more than 30% of the final grade, the student has already used 2 self-reported absences, the absence is during the final exam period), may receive academic consideration by submitting a Student Medical Certificate (for illness) or other appropriate documentation (for compassionate grounds). The Student Medical Certificate is available online at

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf.

All students pursuing academic consideration, regardless of type, must contact their instructors no less than 24 hours following the end of the period of absence to clarify how they will be expected to fulfill the academic responsibilities missed during their absence. Students are reminded that they should consider carefully the implications of postponing tests or midterm exams or delaying submission of work, and are encouraged to make appropriate decisions based on their specific circumstances.

Students who have conditions for which academic accommodation is appropriate, such as disabilities or ongoing or chronic health conditions, should work with Accessible Education Services to determine appropriate forms of accommodation. Further details concerning policies and procedures may be found at: <u>http://academicsupport.uwo.ca/</u>.

Policy on Academic Consideration for a Medical/ Non-Medical Absence

(a) Consideration on <u>Medical Grounds</u> for assignments worth *less than 10%* of final grade: Consult Instructor Directly and Contact Academic Advising

When seeking consideration on **medical grounds** for assignments worth *less than 10%* of the final course grade, and if the student has exceeded the maximum number of permissible Self-Reported absences, the student should contact the instructor directly. The student need only share broad outlines of the medical situation. The instructor **may** require the student to submit documentation to the academic advisors, in which case she or he will advise the student and inform the academic advisors to expect documentation. If documentation is requested, the student will need to complete and submit the <u>Student Medical Certificate</u>. The instructor may <u>not</u> collect medical documentation. The advisors will contact the instructor when the medical documentation is received, and will outline the severity and duration of the medical challenge

as expressed on the Student Medical Certificate and in any other supporting documentation. The student will be informed that the instructor has been notified of the presence of medical documentation, and will be instructed to work as quickly as possible with the instructor on an agreement for accommodation.

(b) Consideration on <u>Non-Medical</u> Grounds: Consult Huron Support Services/Academic Advising, or email <u>huronsss@uwo.ca</u>.

Students seeking academic consideration for a **non-medical** absence (e.g. varsity sports, religious, compassionate, or bereavement) will be required to provide appropriate documentation where the conditions for a Self-Reported Absence have not been met, including where the student has exceeded the maximum number of permissible Self-Reported. All consideration requests must include a completed <u>Consideration Request Form</u>. Late penalties may apply at the discretion of the instructor.

Please review the full policy on Academic Consideration for medical and non-medical absence at: <u>https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_illness.pdf</u>. Consult <u>Huron Academic</u> <u>Advising</u> at <u>huronsss@uwo.ca</u> for any further questions or information.

Support Services

For advice on course selections, degree requirements, and for assistance with requests for medical accommodation, students should email an Academic Advisor in Huron's Student Support Services at <u>huronsss@uwo.ca</u>. An outline of the range of services offered is found on the Huron website at: <u>https://huronatwestern.ca/student-life/student-services/</u>.

Department Chairs, Program Directors and Coordinators are also able to answer questions about individual programs. Contact information can be found on the Huron website at: <u>https://huronatwestern.ca/contact/faculty-staff-directory/</u>.

If you think that you are too far behind to catch up or that your workload is not manageable, you should consult your Academic Advisor. If you are considering reducing your workload by dropping one or more courses, this must be done by the appropriate deadlines. Please refer to the Advising website, <u>https://huronatwestern.ca/student-life/student-services/academic-advising/</u> or review the list of official Sessional Dates on the Academic Calendar, available here: <u>http://www.westerncalendar.uwo.ca/SessionalDates.cfm</u>.

You should consult with the course instructor and the Academic Advisor who can help you consider alternatives to dropping one or more courses. Note that dropping a course may affect OSAP and/or Scholarship/Bursary eligibility.

Huron Student Support Services: <u>https://huronatwestern.ca/student-life/student-services/</u> Office of the Registrar: <u>https://registrar.uwo.ca/</u> Student Quick Reference Guide: <u>https://huronatwestern.ca/student-life/student-services/#1</u> Academic Support & Engagement: <u>http://academicsupport.uwo.ca/</u> Huron University College Student Council: <u>https://huronatwestern.ca/student-life/beyond-classroom/hucsc/</u> Western USC: <u>http://westernusc.ca/your-services/#studentservices</u>

Mental Health & Wellness Support at Huron and Western

University students may encounter setbacks from time to time that can impact academic performance. Huron offers a variety of services that are here to support your success and wellbeing. Please visit <u>https://huronatwestern.ca/student-life-campus/student-services/wellness-safety</u> for more information or contact staff directly:

Wellness Services: <u>huronwellness@huron.uwo.ca</u> Community Safety Office: <u>safety@huron.uwo.ca</u> Chaplaincy: <u>gthorne@huron.uwo.ca</u>

Additional supports for Health and Wellness may be found and accessed at Western through, https://www.uwo.ca/health/.