# THE DIGITAL ECONOMY SPRING 2023

## **GEOG 411**

Published Apr 28, 2023

## **CLASS SCHEDULE**

Section	Location	Time	Instructor(s)
GEOG 411 001 [LEC]	EV1 350	Tuesdays 2:30 p.m 5:20 p.m.	Daniel Cockayne daniel.cockayne@uwaterloo.c
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#### **INSTRUCTOR / TA INFORMATION**

#### Instructor

Dr. Daniel Cockayne (he/him) EV1-312

Email: daniel.cockayne@uwaterloo.ca

Office hours: Mondays 12:00pm - 2:00pm

#### **Teaching Assistant**

Sabrina Zaman

Email: s32zaman@uwaterloo.ca

Office hours:

## **COURSE DESCRIPTION**

### Calendar Description for GEOG 411

This course explores the spatial, social, cultural, and economic impacts of digital and social media on society from the perspective of economic geography. Content will cover contemporary issues about digital media and economic spaces that create spatial patterns (including international differences) of digital media access and use, social media economies, the sharing economy, influencer and streamer economies, and global online work platforms.

Prereq: GEOG 202 or GEOG 203 or Level at least 3A. Antireq: GEOG 474 001 F17, GEOG 474 001 S18

GEOG411 is an advanced undergraduate lecture and discussion seminar that focusses on entrepreneurship and digital media in contemporary society. Entrepreneurship in modern society is often associated with digital media, in economic

sectors in San Francisco, New York City, and Kitchener-Waterloo. The digital economy is an emerging result of this entrepreneurship, as digital applications and platforms are increasingly changing the way that we produce, consume, and work in the 21<sup>st</sup> Century. Connecting to labor markets, consumers, and sellers across the globe through smartphones or the browser for anyone with an internet connection or data plan has dramatically changed our daily economic realities. Beginning with the infrastructures that supports digital systems and entrepreneurship, and with a close focus on entrepreneurial digital media production in Silicon Valley, this course explores the numerous ways that digital systems implicate economic systems, examining social media, attention economies, the sharing economy, digital work platforms, and influencer economies. In light of the widespread rhetoric and narratives about the future of work, this course puts the emerging digital economy into social, political, and geographical context.

#### **LEARNING OUTCOMES**

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

Describe the digital infrastructures and systems that support the digital economy and the geographic histories of their emergence.

Critically analyze the economic systems that are necessary conditions for modern-day digital media technologies.

Identify how digital technologies and systems have impacted the economy, by looking at: social media and attention economies, the gig economy, digital work platforms, and influencer and streamer economies.

Theorize these phenomena in relation to geographical concepts including the international division of labor and difference in the global economy.

#### **TENTATIVE COURSE SCHEDULE**

**Seminar topics and required readings** (subject to change):

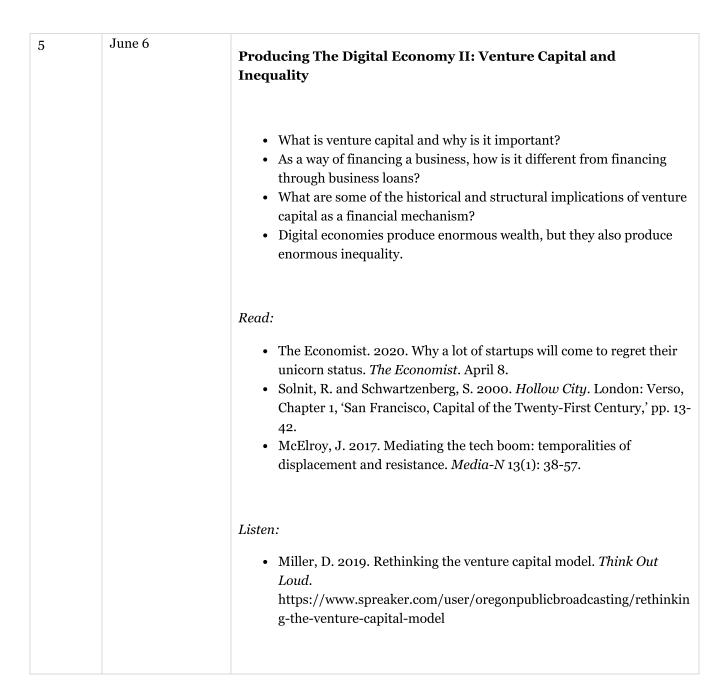
Week	Date	Topics and reading
1	May 9	<ul> <li>Introduction.</li> <li>Introduction of the course topics, assignments, and expectations.</li> <li>Remote learning - using key technologies.</li> <li>Situating the digital economy - a review of key macroeconomic trends (review of GEOG202).</li> </ul>
		<ul> <li>Read:</li> <li>Srnick, N. 2017. Platform Capitalism. London: Polity Press, Chapter 1, 'The Long Downturn,' pp. 11-25.</li> </ul>

2	May 16	Where Did The Digital Economies Come From?, or, A Brief History of the Internet
		<ul> <li>What, exactly, is the internet anyway?</li> <li>A brief history of the internet.</li> <li>Key technologies and infrastructures (the cloud, the tube, satellites).</li> <li>Digital divides and inequalities.</li> </ul>
		<ul> <li>Blum, A. 2012. Tubes: A Journey to the Center of the Internet. London: Pantheon, Chapter 2, 'A Network of Networks,' pp. 28-48.</li> <li>Dyson, G. 2012. Turing's Cathedral. London: Vintage, Chapter 1, '1953,' pp. 3-10.</li> <li>Starosielski, S. 2015. The Undersea Network. Durham: Duke University Press, Chapter 1, 'Against Flow,' pp. 1-21.</li> </ul>
		<ul> <li>Listen:         <ul> <li>Henn, S. 2014. Searching the planet to find power for the cloud. NPR: All Things Considered.</li> <li>https://www.npr.org/sections/alltechconsidered/2014/04/21/30566 6363/searching-the-planet-to-find-power-for-the-cloud</li> </ul> </li> <li>Smith, SV and Garcia C. 2019. Bitcoin's energy bill. The Indicator from Planet Money.         <ul> <li>https://www.npr.org/2019/07/12/741216855/bitcoins-energy-bill</li> </ul> </li> </ul>
3	May 23	No class due to Victoria Day - this Tuesday follows a Monday schedule.

4	May 30	Producing The Digital Economy I: Silicon Valley & San Francisco
		This seminar: introduce short analytical essay
		<ul> <li>Silicon Valley a center of the digital economy - how did this come about?</li> <li>Overview of the history of Silicon Valley and other major centers of digital media production in the US and Canada.</li> <li>How do we measure 'success' in the digital media sector?</li> </ul>
		Read:  • The Economist. 2020. Anatomy of an investing bubble. The
		<ul> <li>Economist. April 4.</li> <li>Florida, R., Adler, P., King, K. and Mellander, C. 2020. The city as startup machine: the urban underpinnings of modern entrepreneurship. In: M. N. Iftikhar, J. B. Justice, and D. B. Audretsch (eds) <i>Urban Studies and Entrepreneurship</i>. Cham: Springer, pp. 19-30</li> <li>Walker, R. 2018. <i>Pictures of a Gone City</i>. Oakland: PM Press, Chapter 1, 'Tech City: Beyond the Myth of Immaculate Innovation,' pp. 13-45.</li> </ul>
		Listen:

• Swisher, K., & O'Mara, M.. 2019. Silicon Valley doesn't understand its

own history. Recode/Decode [62 minutes].



6	June 13	Social Media and Attention Economies
		"Senator, we run ads." - Mark Zuckerberg, Facebook CEO, speaking at the US Senate in 2018.
		<ul> <li>How do high-profile social media companies make money, and what is it like to work at these companies?</li> <li>Advertising and data allow these companies to run - how do they keep people interested? What is the attention economy?</li> <li>What are some of the perhaps unintended impacts of the rise of social media?</li> </ul>
		<ul> <li>Cadwalladr, C and Graham-Harrison, E. 2018. 50 million Facebook profiles harvested for Cambridge Analytica in major data breach. <i>The Guardian</i>.</li> <li>van Dijck, J. 2013. <i>The Culture of Connectivity: A Critical History of Social Media</i>. Oxford: Oxford University Press, pages 3-23.</li> <li>Marwick, A. 2015. Instafame: luxury selfies and the attention economy. <i>Public Culture</i> 27(1): 137-160.</li> </ul>
		<ul> <li>Watch:</li> <li>The RSA. 2017. The Attention Economy with James Williams.         Available at: https://www.youtube.com/watch?v=50R21mblLb0         (https://www.youtube.com/watch?v=50R21mblLb0) [6 minutes]</li> </ul>

7	June 20	The Gig Economy - Uber and Airbnb
		<ul> <li>What is a gig? What is the gig economy? How have platforms disrupted and created new regimes of work?</li> <li>How have 'gig economy' platforms like Uber and Airbnb changed sectors and industries?</li> <li>What are some of the effects of the gig economy? Are these platforms really different from prior forms of economic activity?</li> <li>How does the gig economy relate to concepts like precarity?</li> </ul>
		<ul> <li>Rosenblat, A and Stark, L. 2016. Algorithmic labor and information asymmetries: a case study of Uber drivers. <i>International Journal of Communication</i>, 10: 3758-3784.</li> <li>Spangler, I. 2020. Hidden value in the platform's platform: Airbnb, displacement, and the un-homing spatialities of emotional labor. <i>Transactions of the Institute of British Geographers</i>.</li> </ul>
		<ul> <li>Listen:</li> <li>Barbaro, M. 2018. The taxi driver's plight. The Daily. Available at: https://www.nytimes.com/audio/2018/05/02/podcasts/2daily-audio.html?searchResultPosition=1</li> <li>Wendland, T., &amp; Goldmark, A. 2019. New Orleans vs. Airbnb. Planet Money. Available at: https://www.npr.org/sections/money/2019/02/28/698763891/ep isode-897-new-orleans-vs-airbnb</li> </ul>

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8	June 27	Influences, Streamers, and eSports
		<ul> <li>The internet allows people to create personas online, and many have found ways to monetize these platforms for themselves, through procuring idealized performances of the self.</li> <li>Streamers and influencers make money through sponsorship and through cuts of platforms' ad revenue.</li> <li>Streamers' content is often highly curated and managed, though give the appearance of being spontaneous or 'natural,' many also spend thousands in startup costs, for technology and recording equipment.</li> <li>What are some of the implications of these shifts?</li> </ul>
		Read:
		<ul> <li>Tolentino, J. 2019. The age of Instagram face. The New Yorker. December 12.</li> <li>Marwick, A. 2013. Chapter 3 - The Fabulous Lives of Micro-Celebrities Status Update: Celebrity, Publicity, and Branding in the Social Media Age. New Haven: Yale University Press. Introduction + Chapter 2. (Pages 112-162.)</li> <li>Lin, Z and Zhao, Y. 2020. Self-enterprising eSports: Meritocracy, precarity, and disposability of eSports players in China. International Journal of Cultural Studies.</li> </ul>
		<ul> <li>Watch:</li> <li>Rossi, A. 2018. 7 Days Out, Episode 6, "League of Legends," Netflix [46m]</li> </ul>

9	July 4	Technology and the Cult of Celebrity: Fyre: The Greatest Party that Never Happened
		<ul> <li>What are some of the consequences of the celebrity culture that is perpetuated online?</li> <li>What are some of the darker sides of entrepreneurship and privilege that characterize a many digital companies?</li> <li>How do these factors affect and implicated offline economies too?</li> </ul>
		Watch:
		• Smith, C. 2018. Fyre: The Greatest Party that Never Happened. Netflix [97m].
		<ul><li>Read:</li><li>Tolentino. 2017. The Fyre Festival was a luxury nightmare. The New</li></ul>
		<ul> <li>Yorker.</li> <li>Sims, D. 2019. Why people paid thousands of dollars to attend a doomed music festival. <i>The Atlantic</i>.</li> </ul>
10	July 11	Digital payments, cryptocurrency, and the blockchain
		Content and readings TBD
	Friday July 14	Short Analytical Essay Due

11	July 18	Producing Digital Economies III: Work Platforms and The Planetary Labor Market
		<ul> <li>'Microwork' platforms like Amazon's Mechanical Turk allow employers to connect with workers anywhere in the world if they have an internet connection.</li> <li>Workers perform menial 'microtasks' that aren't easily automated.</li> <li>This work is often unregulated, ununionized, poorly paid, generating further global inequality.</li> <li>Could labor platforms also provide an opportunity though?</li> </ul>
		<ul> <li>• Irani, L. 2015. Difference and dependence amongst digital workers: the case of Amazon Mechanical Turk. The South Atlantic Quarterly 114(1): 225-234.</li> <li>• Anwar, M. A., Graham, M. 2019. Hidden transcripts of the gig economy: labor agency and the new art of resistance among African gig workers. Environment and Planning A: Economy and Space.</li> </ul>
		Listen:  • Chace, Z., Kenney, C. 2015. The people inside your machine. Planet Money Available at:  https://www.npr.org/sections/money/2015/01/30/382657657/episo de-600-the-people-inside-your-machine

12	July 25	Producing Digital Economies IV: Outside the Digital Economy
		<ul> <li>The technology that we use everyday is produced through a geographically dispersed but highly integrated global economy.</li> <li>These networks are essential for the functioning of the digital economy as we know it - but they are often unthought and unspoken.</li> <li>What outsources and offshored forms of work are necessary to produce computers and smartphones?</li> <li>How are race and gender relevant for understanding our daily usage of advanced technologies?</li> <li>Spotlight on Foxxcon and Apple's global production network.</li> </ul>
		<ul> <li>Chan, J., Pun, N. and Selden, M. 2013. The politics of global production: Apple, Foxconn, and China's new working class. New Technology, Work, and Employment 28 (2): 100-115.</li> <li>Nakamura, L., 2014. Indigenous circuits: Navajo women and the racialization of electronic manufacture. American Quarterly, 66 (4), 919-941.</li> </ul>

13	August 1	The Future of Work: Technology, Automation, and AI
		This seminar: take-home exam released with time for discussion
		<ul> <li>Technology is dramatically changing our lives, including how we work.</li> <li>Narratives that attempt to predict our working futures are usually dystopian (job loss) or utopian (free from the toil of work).</li> <li>It's likely that neither are wholly accurate - so what will the future of work look like? Who will benefit from that future, and who will lose out? How are futures of work geographically different?</li> </ul>
		<ul> <li>Bissell, D., &amp; Del Casino, V. 2017. Whither labor geography and the rise of the robots? Social &amp; Cultural Geography 18(3): 435-442.</li> <li>Spencer, D. 2018. Fear and hope in an age of mass automation: debating the future of work. New Technology, Work and Employment 33(1): 1-12.</li> <li>Graham, M., et al. 2020. The Fairwork Founation: strategies for improving platform work in a global context. Geoforum 112: 100-103.</li> </ul>
	Tues August 1	Classes end
	Friday August 4	Take-home exam due

# **TEXTS / MATERIALS**

No materials required.

## STUDENT ASSESSMENT

Component	Value
Participation and engagement (including weekly seminar attendance)	40

Component	Value
Short analytical essay	30
Take-home exam	30

#### Assessment

Participation (4% per week over 10 weeks, **40% in total**):

- Participation will be self-assessed
- This will primarily be in the form of discussion during the weekly seminar framed around the instructor presentation and readings
- You'll be in groups of 3-4 for discussion the make-up of these groups may vary throughout the term
- · Responsibilities and tasks on individuals within a group will vary between weeks

#### Short analytical essay (30%):

- You'll write a short analytical essay (approximately 2,000 words excluding references) on a topic of your choosing
- Your essay should include an **argument** or **thesis statement** that you should introduce evidence to defend
- The paper should be **primarily critical/analytical** in nature it should not be primarily descriptive/summative
- You should cite at least ten peer-reviewed academic journal articles not set in the class syllabus
  - You can of course site other materials too including material on the syllabus
- You will have time during the seminar to outline and discuss this assignment, and workshop your argument statement, both with your peers and with the instructor
- You can use one of the weekly topics, or another topic not specifically covered in class that relates to the theme of The Digital Economy broadly conceived

## Take-home exam (30%):

- The exam will be released during the final seminar on August 1st
- You will have Tuesday through Friday to complete the exam

# **ASSIGNMENT SCREENING**

Text matching software (Turnitin) will be used to screen assignments in this course. This is being done 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 and alternatives in this course. See Administrative Policy below for more information and links.

#### **ADMINISTRATIVE POLICY**

recommended:

**Territorial Acknowledgement:** The University of Waterloo acknowledges that much of our work takes place on the traditional territory of the Neutral, Anishinaabeg and Haudenosaunee peoples. Our main campus is situated on the Haldimand Tract, the land granted to the Six Nations that includes six miles on each side of the Grand River. Our active work toward reconciliation takes place across our campuses through research, learning, teaching, and community building, and is centralized within the Office of Indigenous Relations (https://uwaterloo.ca/indigenous)

Intellectual Property: For further information on IP related to teaching, please see <a href="https://uwaterloo.ca/legal-and-immigration-services/sites/ca.legal-and-immigration-services/files/uploads/files/volume\_1\_issue\_3\_winter\_2018.pdf">https://uwaterloo.ca/legal-and-immigration-services/files/uploads/files/volume\_1\_issue\_3\_winter\_2018.pdf</a>) and the Guidelines for Faculty, Staff and Students Entering Relationships with External Organizations Offering Access to Course Materials, <a href="https://uwaterloo.ca/secretariat/faculty-staff-and-students-entering-relationships-external">https://uwaterloo.ca/secretariat/faculty-staff-and-students-entering-relationships-external</a>). The following text is

Students should be aware that this course contains the intellectual property of their instructor, TA, and/or the University of Waterloo. Intellectual property includes items such as:

- -Lecture content, spoken and written (and any audio/video recording thereof);
- -Lecture handouts, presentations, and other materials prepared for the course (e.g., PowerPoint slides);
- -Questions or solution sets from various types of assessments (e.g., assignments, quizzes, tests, final exams); and
- -Work protected by copyright (e.g., any work authored by the instructor or TA or used by the instructor or TA with permission of the copyright owner).

Course materials and the intellectual property contained therein, are used to enhance a student's educational experience. However, sharing this intellectual property without the intellectual property owner's permission is a violation of intellectual property rights. For this reason, it is necessary to ask the instructor, TA and/or the University of Waterloo for permission before uploading and sharing the intellectual property of others online (e.g., to an online repository).

Permission from an instructor, TA or the University is also necessary before sharing the intellectual property of others from completed courses with students taking the same/similar courses in subsequent terms/years. In many cases, instructors might be happy to allow distribution of certain materials. However, doing so without expressed permission is considered a violation of intellectual property rights.

Please alert the instructor if you become aware of intellectual property belonging to others (past or present) circulating, either through the student body or online. The intellectual property rights owner deserves to know (and may have already given their consent).

Research Ethics: The University of Waterloo requires all research conducted by its students, staff, and faculty which involves humans as participants to undergo prior ethics review and clearance through the Director, Office of Human Research and Animal Care (Office). The ethics review and clearance processes are intended to ensure that projects comply with the Office's Guidelines for Research with Human Participants (Guidelines) as well as those of provincial and federal agencies, and that the safety, rights and welfare of participants are adequately protected. The Guidelines inform researchers about ethical issues and procedures which are of concern when conducting research with humans (e.g. confidentiality, risks and benefits, informed consent process, etc.). If the development of your research proposal consists of research that involves humans as participants, the please contact the course instructor for guidance and see: <a href="https://uwaterloo.ca/research/office-research-ethics">https://uwaterloo.ca/research/office-research-ethics</a> (https://uwaterloo.ca/research/office-research-ethics)

Anti-racism Statement: The University of Waterloo does not tolerate racism or any other form of discrimination and expects campus community members to contribute to a culture where all members feel safe and valued. Any member of the campus community who has experienced racism or discrimination at the University is encouraged to seek guidance from the Office of Equity, Diversity, Inclusion & Anti-racism (EDI-R) via email at equity@uwaterloo.ca (mailto:equity@uwaterloo.ca) or through their website: > uwaterloo.ca/human-rights-equity-inclusion/equity-office

**Co-op interviews and class attendance:** Co-op students are encouraged to try and choose interview time slots that result in the least amount of disruption to class schedules. When this is challenging, or not possible, a student may miss a portion of a class meeting for an interview. Instructors are asked for leniency in these situations; but, a co-op interview does not relieve the student of any requirements associated with that class meeting.

When a co-op interview conflicts with an in-class evaluation mechanism (e.g., test, quiz, presentation, critique), class attendance takes precedence and the onus is on the student to reschedule the interview. CEE provides an interview conflict procedure to manage these situations.

Students will be required to provide copies of their interview schedules (they may be printed from WaterlooWorks) should there be a need to verify class absence due to co-op interviews.

**Declaring an absence:** Regardless of the process used to declare an absence, instructors maintain agency over decisions regarding course component accommodations.

Self-declared absences (for flu-like illness, short-term 48 hour self declared absences) must be submitted through Quest.

Absences requiring documentation (e.g. Verification of Illness Form, bereavement, etc.) - send your documentation to env-vif@uwaterloo. Do not send documentation to your advisor, course instructor, teaching assistant, or lab coordinator. Submission to env-vif@uwaterloo.ca () will notify all of your instructors of your absence.

**Mental Health:** The University of Waterloo, the Faculty of Environment and our Departments/Schools consider students' well-being to be extremely important. We recognize that throughout the term students may face health challenges - physical and / or emotional. **Please note that help is available.** Mental health is a serious issue for everyone and can affect your ability to do your best work. Counselling Services <a href="https://uwaterloo.ca/campus-wellness/">https://uwaterloo.ca/campus-wellness/</a> (https://uwaterloo.ca/campus-wellness/) is an inclusive, non-judgmental, and confidential space for anyone to seek support. They offer confidential counselling for a variety of areas including anxiety, stress management, depression, grief, substance use, sexuality, relationship issues, and much more.

All students are encouraged to download the WatSAFE app which is available free through the google and iOS app stores. The WatSAFE app provides on- and off-campus contacts for students in distress, including international students, and other information related to campus safety and security.

**Religious Observances:** Students need to inform the instructor at the beginning of term if special accommodation needs to be made for religious observances that are not otherwise accounted for in the scheduling of classes and assignments.

**Communications with Instructor and Teaching Assistants:** All communication with students must be through either the student's University of Waterloo email account or via LEARN. If a student emails the instructor or TA from a personal account they will be requested to resend the email using their personal University of Waterloo email account.

**Recording lecture:** Use of recording devices during lectures is only allowed with explicit permission of the instructor of the course. If allowed, video recordings may only include images of the instructor and not fellow classmates. Posting of videos or links to the video to any website, including but not limited to social media sites such as: facebook, twitter, etc., is strictly prohibited.

# **UNIVERSITY POLICY**

**Academic integrity**: In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. [Check the Office of Academic Integrity (https://uwaterloo.ca/academic-integrity/) for more information.]

**Grievance:** A student who believes that a decision affecting some aspect of their university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70, Student Petitions and Grievances, Section 4 (https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-70). When in doubt, please be certain to contact the department's administrative assistant who will provide further assistance.

**Discipline:** A student is expected to know what constitutes academic integrity to avoid committing an academic offence, and to take responsibility for their actions. [Check the Office of Academic Integrity (https://uwaterloo.ca/academic-integrity/) for more information.] 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 instructor, academic advisor, or the undergraduate associate dean. For information on categories of offences and types of penalties, students should refer to Policy 71, Student Discipline (https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-71). For typical penalties, check Guidelines for the Assessment of Penalties (https://uwaterloo.ca/secretariat/guidelines/guidelines-assessment-penalties).

**Appeals:** A decision made or penalty imposed under Policy 70, Student Petitions and Grievances (https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-70) (other than a petition) or Policy 71, Student Discipline (https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-71) may be appealed if there is a ground. A student who believes they have a ground for an appeal should refer to Policy 72, Student Appeals (https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-72).

Note for students with disabilities: AccessAbility Services (https://uwaterloo.ca/disability-services/), located in Needles Hall, Room 1401, 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 AccessAbility Services at the beginning of each academic term.

**Turnitin.com:** Text matching software (Turnitin®) may be used to screen assignments in this course. Turnitin® is used to verify that all materials and sources in assignments are documented. Students' submissions are stored on a U.S. server, therefore students must be given an alternative (e.g., scaffolded assignment or annotated bibliography), if they are concerned about their privacy and/or security. Students will be given due notice, in the first week of the term and/or at the time assignment details are provided, about arrangements and alternatives for the use of Turnitin in this course.

It is the responsibility of the student to notify the instructor if they, in the first week of term or at the time assignment details are provided, wish to submit alternate assignment.