



**Sociology 3337G (570)
Technology and Social Change
Fall/ Winter 2025-2026**

Instructor: A. Ning

Email: aning@uwo.ca

Course Information

Calendar Description:

This course explores the prospects and challenges of technological and scientific developments such as the Internet and digital technologies; biotechnology; cyber-technology and Artificial Intelligence (AI) to solve recurring problems in local and global settings. These intersections of technology, science, and social change will be considered through multiple ways of knowing.

Prerequisite(s): Third or fourth year standing in a Sociology or Criminology module.

Extra Information: 3 hours.

Course Weight: 0.50

Breadth: Category A

Subject Code: SOCIOLOG

Notice: Unless you have either the requisites for this course (fulfilment of pre-requisites, no anti-requisite conflicts), or special permission from your Dean to enrol 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.



Technology and Social Change
Sociology 3337 (570)
Winter 2025-2026

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Professor: Dr. Ana Ning

E-mail: aning@uwo.ca

Office Hours: Mondays, 1:00-2:00 pm or by appointment, in-person or virtual

The focus in this course is to engage students into reflecting upon the roles and impacts of technology and other scientific developments in our contemporary lives. Key questions include: How are technological devices changing our communication, health and well-being? Are technology and science enhancing or constraining meaningful solutions to pressing issues e.g., climate change, economic insecurity, public health problems, political uncertainty, etc.? How are Big Tech platforms transforming the way Canadians consume their culture or tackle life insecurities?

Taking an inquiry-based approach, we will investigate various perspectives on the intersections between technology, science and social change, considering the impacts of such intersections on different social issues (e.g., privacy, trust, identity, community) and within diverse social contexts (e.g., health, culture, environment, workforce). We will explore the prospects and challenges of technological and scientific developments such as the Internet and digital technologies; biotechnology; cyber-technology and Artificial Intelligence (AI) to solve recurring problems in local and global settings.

Format: Weekly lectures, seminar discussions, readings, films, podcasts, and student presentations.

Assessments:	In-class Short Critical Reflection	15% (February 2, 2026)
	“Show and Tell” PBL Group Project	20% (See BRIGHTSPACE course site)
	In-class Midterm Exam	25% (March 16, 2026)
	Individual PBL Project Report	25% (Due April 10, 2026)
	Attendance and Participation	15% (See BRIGHTSPACE course site)

Required Readings:

- 1) Selected **scholarly and media articles** available in course’s Brightspace site under “Course Readings” (**No Cost**)

Academic Integrity:

Within this course, the use of artificial intelligence (AI) tools [such as Chat GPT] is not permitted for written work submitted for evaluation as this constitutes a form of academic plagiarism. It is expected that you will submit work that is truly your own, completed without external assistance (human or artificial). Written work may be subject to submission for similarity review by software such as Turnitin that will check for unusual coincidences in exam answer and essay writing patterns that may indicate cheating.

NB: Please refer to our **BRIGHTSPACE course site** for details regarding course assessments, expectations and policies.

Course Learning Outcomes

This course introduces and/or reinforces key sociological skills, namely, the ability to:

1. Demonstrate a holistic understanding of the interface between technology and social change.
2. Situate past and present issues regarding the impacts of science and technology at both local and global levels.
3. Identify, contrast and compare interdisciplinary perspectives, recognizing the provisional status of knowledge.
4. Distinguish and build connections between different schools of thought.
5. Employ a decolonizing lens to technology and social issues.
6. Demonstrate analytical and critical thinking skills.
7. Advocate for equity, diversity, inclusivity and different ways of being, doing and knowing beyond Western systems of thought and practices.
8. Identify and explain the role of power and social inequities in shaping people's access to technology locally and globally.
9. Design and develop persuasive arguments.
10. Write using academic language and argumentation.
11. Demonstrate self-awareness and appropriate interpersonal skills.
12. Demonstrate capacity to work independently and collaboratively in groups.
13. Link theory to practice, applying sociological skills and knowledge to real life situations.
14. Engage in problem-based and inquiry-based learning to propose meaningful changes/solutions to pressing issues within diverse communities.

Technology and Social Change

Winter 2025-2026

SYLLABUS – LECTURE SCHEDULE

- Jan. 5 **Introduction**
Read: Course Outline
- Jan. 12 **Social Construction of Expert/Scientific Knowledge**
Read: **Graves et al.** (2022): Inequality in Science and the Case for a New Agenda, *In PNAS*, vol. 119 No. 10e2117831119 <https://doi.org/10.1073/pnas.2117831119>
Goldenberg (2023): Public Trust in Science, *In Interdisciplinary Science Reviews*, vol. 48 No. 2: 366-378 <https://doi.org/10.1080/03080188.2022.2152243>

Video: [State of the Science: Public Trust](#)
- Jan. 19 **Big Pharma: Drugs, Vaccines and Epidemics**
Read: **Helmerhorst et al.** (2017): An Epidemic of the Use, Misuse and Overdose of Opioids and Deaths due to Overdose, in the United States and Canada *In Bone Joint Journal*, 99-B: 856–64
Nguyen & Catalan-Matamoros (2020): Digital Mis/Disinformation and Public Engagement with Health and Science Controversies: Fresh Perspectives from Covid-19 *In Media and Communication* (ISSN: 2183–2439) 2020, Vol. 8(2): 323–328
Lazarus et al. (2023): Vaccine Inequity and Hesitancy Persist: How We Must Tackle Both *In the BMJ* 2023; 380: p8 | doi: 10.1136/bmj.p8

Video: [COVID-19: Conspiracy theories and vaccine hesitancy](#)
- Jan. 26 **Internet and Digital Technologies: Friends or Foes?**
Read: **Redlich et al.** (2025): Debate: Social media in children and young people – time for a ban? Beyond bans: addressing the digital determinants of youth mental health and

well-being in the European region *In Child and Adolescent Mental Health* 30, No. 4, 2025, pp. 408–410 doi:10.1111/camh.70031

Samer et al. (2024): Australia Social Media Ban for Kids *In [Institute for Youth in Policy: Policy Media Department Brief](#)*

Duerden & Kent (2024): Excessive social media use during the COVID-19 pandemic exacerbated adolescent mental health challenges *In [Conversation](#)*, January 18, 2024

Video: [Why you're addicted to your smartphone? \(Marketplace\)](#)

Feb. 2 **In-class Short Critical Reflection**

Feb. 9 **Online Gambling and Sports Betting: Who's Winning?**

Read: **Pilkington et al.** (2025): A Prospective Study of Mental Health in Relation to Online Gambling One-year Later in a Large Cohort of Adolescents in Canada *In [Journal of Gambling Studies](#)* <https://doi.org/10.1007/s10899-025-10447-2>

Charelebois & Kelly (2025): Protecting Canada's youth from the risks of exposure to gambling advertising (Editorial) *In [CMAJ](#)* 2025 September 8;197:E918-9. doi: 10.1503/cmaj.251227

Banfield (2025): Senators call on prime minister to ban advertising for sports betting *In [CBC News](#)*, November 23, 2025

Video: [The Big Gamble - CBC Marketplace](#)

Feb. 16 **WINTER READING WEEK- NO CLASS**

Feb. 23 **Privacy and Surveillance in the Digital Age**

Read: **Drovic** (2025) Surveillance Capitalism and the New Social Order: Rethinking Freedom in the Digital Age *In [OTS Canadian Journal](#)*, Vol-4, Issue-9; September, 2025 Doi: <https://doi.org/10.58840/x1dvay91>

Tunney (2025) Privacy commissioners find TikTok collected sensitive data from Canadian children. *In [CBC News](#)*, September 23, 2025

Maiman (2025) 'Can I see some ID?' As online age verification spreads, so do privacy concerns. *In [CBC News](#)*, August 3, 2025

Film: *The Social Dilemma*

Mar. 2 **Technology and the Environment in the Anthropocene**

Read: **Madaminjonovna & Uzoqjonov** (2025): The possibilities of solving environmental problems through technology *In [Academic Journal of Science, Technology and Education](#)*, Volume 1, Issue 7: 11-15

Nazir et al. (2020): Impacts of Wind Energy Development: A Global Perspective. *In [Current Opinions in Environmental Science and Health](#)*, Vol. 13: 85-90.

Logan (2025): What on Earth Podcast: Are EVs really greener than gas-powered cars? *In [CBC News and Podcast](#)*, August 14, 2025

Video: *How Rwanda is leading e-waste recycling efforts in Africa*

Mar. 9 **Biotech, Genetics and Genomics: A Brave New World?**

Read: **Sandor** (2022): Genome Editing: Learning from Its Past and Envisioning its Future *In [European Journal of Health Law](#)*, 29 (2022) 341–358

Ablison (2024): Biotechnology Pros and Cons: Are We Ready for What's Coming? *In [Medium](#)*, October 19, 2024

CBAN (2025): Gene-edited fruits and vegetables: The threat of new GMOs in Canada. In [Canadian Biotechnology Action Network](#), December 2, 2025. Executive Summary: Pp. 1-8 and Annex: Pp. 21-22.

Video: [Scientist claims he helped create world's first genetically modified babies](#)

Mar. 16 **In-Class Midterm Exam**

Mar. 23 **Big Tech: Pros and Cons**

Read: **Hendrikse et al. (2022)** The Big Techification of Everything. *Science as Culture*, 31(1), 59–71. <https://doi.org/10.1080/09505431.2021.1984423>
Amnesty International (2025): Why are Big Tech companies a threat to human rights? In [Amnesty International News](#), August 29, 2025
Doan & Ingram (2025) What donors to Trump's White House ballroom stand to gain from the federal government In [CBS News](#), October 25, 2025

Video: [How much money has Big Tech given to Donald Trump?](#)

Mar. 30 **Artificial Intelligence: Prospects and Challenges for Future Humanity**

Read: **Abdallah et al. (2025):** Systematic review of ChatGPT in higher education: Navigating impact on learning, wellbeing, and collaboration In *Social Sciences and Humanities Open Volume 12, 2025, 101866*
<https://doi.org/10.1016/j.ssaho.2025.101866>
Young (2025): The hidden humans powering the AI economy In [CBC News](#), November 6, 2025
Tunney (2025): Ottawa plagued by 'significant gaps' responding to cyberattacks: AG In [CBC News](#), October 21, 2025.

Video: [The Godfather in Conversation: Why Geoffrey Hinton is Worried about the Future of AI](#)

Apr. 6 **Final Wrap-Up: Q &A & optional brief presentations of PBL Project Report for 5% out of 25%**

N.B. Apr. 9th Individual PBL Project Report due by 11:59 pm in the Assignments drop box in the course's BRIGHTSPACE Assessments tab

N.B. Course syllabus is subject to changes at the instructor's discretion.

KING'S UNIVERSITY COLLEGE

GENERAL COURSE POLICIES

2025-2026

1. Academic Accommodations, Consideration for Absences

Academic Accommodation (Accessibility)

Accessibility Services works to ensure that academic programs are accessible to all students, and supports students who may have a condition related to, but not limited to, vision, hearing, mobility, different ways of learning, mental health, chronic illnesses, chronic pain, autism spectrum disorder, ADD/ADHD, and temporary conditions (beyond short-term academic consideration). Accessibility Services provides recommendations for accommodation based on medical documentation or psychological and cognitive assessment. The accommodation policy can be found here [Academic Accommodation for Students with Disabilities](#). Information on Accessibility Services at King's can be found [here](#).

Academic Consideration for Student Absence

If a student is unable to meet a course requirement due to substantial but temporary extenuating circumstances (medical or compassionate), they should follow the procedures below.

In some cases, where instructors have built flexibility into their assessments, this flexibility will already address consideration needs.

Requests for academic consideration should be directed to the Academic Advising Office of your faculty/college of registration. Requests must be made as soon as possible and no later than 48 hours after the missed assessment.

As a rule, documentation is required for academic consideration. For academic consideration requests on medical grounds, the Student Medical Certificate is available at https://www.kings.uwo.ca/kings/assets/File/currentStudents/courses_enrollment/exams_and_tests/SMC-Feb-2025.pdf.

Students are permitted one academic consideration request without supporting documentation per term per course.

Instructors may designate one assessment per half-course weight as requiring formal supporting documentation. Please refer to the course outline for each course.

For further information, please see:

https://uwo.ca/univsec/pdf/academic_policies/appeals/academic_consideration_Sep24.pdf

Absences from Final Examinations

If you miss the Final Exam, contact the Academic Advising Office of your faculty/college of registration as soon as you are able to do so. They will assess your eligibility to write the Special Examination (the name given by the University to a makeup Final Exam).

You may also be eligible to write the Special Exam if you are in a “Multiple Exam Situation” (e.g., more than 2 exams in 23-hour period, or more than 3 exams in a 47-hour period).

If a student fails to write a scheduled Special Examination, the date of the next Special Examination (if granted) normally will be the scheduled date for the final exam the next time this course is offered. The maximum course load for that term will be reduced by the credit of the course(s) for which the final examination has been deferred. See the Academic Calendar for details (under [Special Examinations](#)).

Religious Accommodation

Students should consult the University's list of recognized religious holidays, and should give notice in writing to the instructor and Academic Advising Office if a course requirement will be affected by a religious holiday/observance. Notice must be given as early as possible, and no later than two weeks prior to an examination, and one week prior to a midterm test date. It is the responsibility of such students to inform themselves concerning the work done in classes from which they are absent and to take appropriate action.

2. Support Services

Accessibility, Counselling and Student Development at King’s University College:

<https://www.kings.uwo.ca/current-students/student-services/>

Students experiencing emotional or mental health distress can access services at King’s University College: <http://www.kings.uwo.ca/current-students/campus-services/student-support-services/personal-counselling/>

Good2talk is a good online and phone 24/7 resource for students and is available in English, Mandarin, and French: <https://good2talk.ca>, 1-866-925-5454

MentalHealth@Western provides a complete list of options about how to obtain help:

https://www.uwo.ca/health/mental_wellbeing/

Academic Support Services at King’s University College:

<https://www.kings.uwo.ca/current-students/academic-resources/>

GBSV Support:

King’s is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at:

<https://www.kings.uwo.ca/about-kings/safe-campus/gender-and-sexual-violence/>

You can reach someone supports at Kings by emailing Care@kings.uwo.ca or calling 519-930-4640 to reach a social worker who can offer help.

You can also reach Western’s Gender-Based Violence & Survivor Support Case Manager by [email](#) or by calling 519-661-3568.

Further supports can be found on this website: <https://www.kings.uwo.ca/about-kings/safe-campus/gender-and-sexual-violence/>

See also https://www.uwo.ca/health/student_support/survivor_support/get-help.html

University Students' Council offers many valuable support services for students, including the health insurance plan: <http://westernusc.ca/services/>

3. Statement on Use of Electronic Devices

Use of Electronic Devices: Unless explicitly stated otherwise, you are not allowed to have a cell phone, or any other electronic device, with you during tests or examinations. Unauthorized possession of such a device during a test or examination constitutes an academic offence.

Use of Laptops, Tablets, and Smartphones in the Classroom: King's University College at Western University acknowledges the integration of new technologies and learning methods into the curriculum. The use of electronic devices such as laptop computers, tablets, or smartphones can contribute to student engagement and effective learning. At the same time, King's recognizes that instructors and students share jointly the responsibility to establish and maintain a respectful classroom environment conducive to learning.

The use of electronic devices by students during lectures, seminars, labs, etc., shall be for matters related to the course at hand only. Students found to be using electronic devices for purposes not directly related to the class may be subject to sanctions under the Student Code of Conduct; see <https://www.kings.uwo.ca/current-students/student-affairs/code-of-student-conduct1/>

Inappropriate use of electronics (e.g., laptops, tablets, smartphones) during lectures, seminars, labs, etc., creates a significant disruption. As a consequence, instructors may choose to limit the use of electronic devices in these settings. In addition, in order to provide a safe classroom environment, students attending in-person class sessions are strongly advised to operate laptops with batteries rather than power cords.

4. Statement on Academic Offences

King's is committed to academic integrity. Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, is posted at

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf

It is expected that students will submit work that is truly their own, completed without external assistance (human or artificial) except as explicitly permitted by the course instructor. Check with your instructor on what tools, including generative AI (ChatGPT, translation tools, grammar-checking tools) are permitted in the course. Because a tool is permitted in one course, that does not mean it is permitted in other courses.

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; see <https://elearningtoolkit.uwo.ca/tools/Originality Reports - TurnItIn.html>.

Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

5. Copyright of Course Material

Lectures and course materials, including PowerPoint presentations, tests, outlines, and similar materials are protected by copyright. Faculty members are the exclusive owner of copyright in those materials they create. Students may take notes and make copies for their own use. Students may not allow others to reproduce or distribute lecture notes and course materials publicly (whether or not a fee is charged) without the express written consent of a faculty member. Unauthorized sharing of class content is subject to academic discipline.

Similarly, students own copyright in their own original papers and exam essays. If a faculty member wishes to post a student's answers or papers on the course website, they should ask for the student's written permission.

6. Use of Recordings

Participants in this course are not permitted to record the sessions, except where recording is an approved accommodation and/or the participant has the prior written permission of the instructor. Unauthorized recording and/or sharing of class content is subject to academic discipline.

7. Policy on Attendance

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.