UNIVERSITY OF CALGARY
SCHOOL OF ARCHITECTURE, PLANNING AND LANDSCAPE

Fall 2025

Land Acknowledgement: https://www.ucalgary.ca/indigenous/cultural-teachings/territorial-land-acknowledgement

Course Number: DSGN 441

Course Name: Transscalar Sustainability in the Built Environment

Classroom: [redacted]

Instructor: Dr. Yanghe Liu

- Email: yanghe.liu@ucalgary.edu
- Office Hours and Location: By appointment
- Instructor Email Policy: Reach out through your @ucalgary email anytime, 24/7. I typically respond within the same half day. Please send a reminder if you've waited more than two working days.

Teaching Assistant: Kiran Qureishi

- Email: kiran.qureishi@ucalgary.ca
- TA Office Hours: By appointment

Class Dates:

- Mandatory in-class sessions
- Tuesdays and Fridays, September 2 – December 5, 9:30 am to 10:45 am

Course Description:

- This course explores the nuances of sustainability in the built environment, aligned with the global movement toward sustainable development. It focuses on understanding the roles of natural ecosystems in urban settings, the economy, and human welfare and on reducing the impacts of human activities. Specifically, the course examines how lessons from sustainable development can guide planning, design, and construction to balance environmental, social, and economic considerations and, in turn, improve overall quality of life. From micro to macro scales, i.e., buildings, neighborhoods, landscapes, and cities, topics include energy efficiency, water conservation, waste management, green technologies, and social sustainability. Special topics cover contemporary artificial intelligence (AI) applications in sustainable planning and design, climate change and adaptation planning, environmental ethics and justice, and building life cycle assessment.

- The course uses a mix of lectures, seminars, readings, and in-class group activities. Our main approach is to sustain open dialogue among all participants (instructors included), anchored in regular discussion of real-world planning issues. The instructor and guest speakers will share current practices and advanced research in sustainable development worldwide and introduce emerging frontiers in the field.
- Academic Calendar description: https://calendar.ucalgary.ca/courses/1663281
- Course Hours: 3 units; (3-0)

Requisites: See Section 3.3.5 of the Academic Calendar for more information regarding School of Architecture, Planning and Landscape courses.

- Prerequisite(s): Design 241 or Sustainability Studies 201 or University 207 and admission to the Bachelor of Design in City Innovation program.
- Corequisite(s): None.
- Antirequisite(s): Credit for Design 441 and either of Sustainability Studies 401 or University 401.30 (Sustainability Research I) will not be allowed.

Course Delivery:

- In-person Delivery

Course Learning Outcomes:

Upon completion of this course, students will know and be able to:

1. Negotiate historical and contemporary understandings of sustainability, resilience, and sustainable development.
2. Evaluate sustainability and resilience in the built environment at component, building, community, city, country, and planetary scales.
3. Apply a comprehensive toolbox for sustainable planning, development, and construction to their personal lives and professional practice.
4. Adapt to complex design challenges using sustainability and resilience principles
5. Situate planning decisions within a global perspective but grounded in local contexts.
6. Position themselves as an advocate for change in response to an unsustainable status quo.

Learning Resources:

- Required readings, textbooks, and learning materials:
  - No required textbook.
  - Mandatory readings are assigned weekly (posted on D2L).
  - GIS or equivalent software and skills are preferred but not required.
- Technology requirements:
  - Laptop to bring to every class.
  - Webcam, microphone, and speakers for recording/presentations.

Special Budgetary Requirements:

None.

Additional Classroom Conduct and Related Information:

- **Code of Conduct:** The SAPL Studio spaces and other SAPL/University-provided facilities and equipment are governed by the University's Student Non-Academic Misconduct Policy. Professional and courteous behavior is expected at all times. For more information, please refer to Appendix 1: Prohibited Conduct, including the following categories: 1. Protection of Individuals; 2. Protection of Property; 3. Protection of University Functions, Activities and Services; 4. False Information and Identification; 5. Possession or Use of Dangerous Objects, Drugs or Alcohol; 6. Aiding in the Commission of an Offence; 7. Contravention of Other Laws and University Policies; and 8. Failure to Comply with a Sanction.
- **Guidelines for Zoom Usage:** Zoom will be used if a guest lecturer cannot participate in person. Some class sessions may be recorded on Zoom to support student learning; students will be notified when recording occurs, and recordings will be available only to enrolled students.

Assessment Components:

The University policy on grading and related matters is described in F.1 and F.2 of the Academic Calendar. In determining the overall grade in the course, the following weights will be used:

Assessment Method	Description/Due	Weight
Assignments	Five short papers/problem sets (8% each)	40%
Mid-term mini project	Individual report	20%
Final team project	Group project presentation + report (30% + 10%)	40%

- Assessment and Evaluation Information:
  - Assignment descriptions, due dates, and other related materials can be found on D2L.
  - If a student misses (or is late for) a required component/assignment of the course for a valid excuse or absence, one must contact the instructor promptly to discuss applicable options to submit and/or make-up for that component/assignment.
- Attendance and Participation Expectations:
  - Students are expected to attend all class sessions.
  - If a student can not attend a lecture, please email the instructor directly.
- Guidelines for Submitting Assignments:
  - All assignments (e.g., projects, papers, presentations, etc.) must be turned in on time.
  - Assignment submission guidelines vary by assignment and can be found in the assignment descriptions on D2L.
  - Late Assignments will lose a letter grade every 48 hours after the submission time.
- Final Examinations:
  - This course has no final examination. Instead, students are required to complete an individual midterm report and a final team project.

- Expectations for Writing:
  - Please see the "Copyright and Legislation" Section of the University of Calgary Policies and Supports for information on the use of AI in this course.
  - Section E.2 Writing Across the Curriculum: https://calendar.ucalgary.ca/pages/2c2d1ce47b8c4d008aec9cc3da49876e
- Criteria that must be met to pass: Students must achieve a minimum grade of 60% on both the midterm and final projects to pass the course. If a required component is not completed or not passed, it will be addressed on a case-by-case basis.

Flexible Grade Option (CG Grade):

As per Section 3.5.1 of the Academic Calendar, the School of Architecture, Planning and Landscape will not permit the Flexible Grade Option (CG Grade) for any course offered by the School, with the exception of the following courses: Architecture 201, Landscape Architecture 201, and Planning 201.

Grading Scale:

Based on Section F.1.1 of the Academic Calendar

Grade	Grade Point Value	4-Point Range	Percent	Description
A+	4.00	4.00	95-100	Outstanding performance
A	4.00	3.85-4.00	90-94.99	Excellent performance
A-	3.70	3.50-3.84	85-89.99	Approaching excellent performance
B+	3.30	3.15-3.49	80-84.99	Exceeding good performance
B	3.00	2.85-3.14	75-79.99	Good performance
B-	2.70	2.50-2.84	70-74.99	Approaching good performance
C+	2.30	2.15-2.49	65-69.99	Exceeding satisfactory performance
C	2.00	1.85-2.14	60-64.99	Satisfactory performance
C-	1.70	1.50-1.84	55-59.99	Approaching satisfactory performance. **Minimum grade requirement for SAPL prerequisite courses.**

D+	1.30	1.15-1.49	50-54.99	Marginal pass. Insufficient preparation for subsequent courses in the same subject.
D	1.00	0.50-1.14	45-49.99	Minimal Pass. Insufficient preparation for subsequent courses in the same subject.
F	0.00	0-0.49	0-44.99	Failure. Did not meet course requirements.

Topic Areas and Detailed Class Schedule:

Date	Description	
Week 1 Course Overview and Introduction to Sustainability		
Tuesday, September 2	Activity	Lecture 1: Course overview and outline explanation
	Reading	1. The course outline
Friday, September 5	Activity	Lecture 2: Sustainability in the built environment
	Reading	1. UCLA. (2021). *What is sustainability?* [Video]. YouTube. https://www.youtube.com/watch?v=zx04Kl8y4dE 2. World Green Building Council. (n.d.). *What is a sustainable built environment?* World Green Building Council. https://worldgbc.org/what-is-a-sustainable-built-environment/ 3. Millet, I., & Pouy, N. (2023). *Achieving sustainability in the built environment, brick by brick*. Environmental and Energy Study Institute (EESI). https://www.eesi.org/articles/view/achieving-sustainability-in-the-built-environment-brick-by-brick 4. Sánchez-Silva, M., Gardoni, P., Val, D. V., Yang, D. Y., Frangopol, D. M., Limongelli, M. P., Honfi, D., Acuña, N., & Straub, D. (2025). Moving toward resilience and sustainability in the built environment. *Structural Safety, 113,* 102449. https://doi.org/10.1016/j.strusafe.2024.102449
Week 2 Sustainability, Resilience, and Development Issues		
Tuesday, September 9	Activity	Lecture 3: Sustainability and resilience
	Reading	1. Phillips, K. (2022, October 6). *Resiliency vs. sustainability: What's the difference?* Tensar Insights. https://www.tensarcorp.com/resources/articles/resiliency-vs-sustainability-what-s-the-difference

		2. Nature Sustainability. (2019). Resilience and sustainability. *Nature Sustainability, 2*(3), 249. https://doi.org/10.1038/s41893-019-0284-4 3. Roostaie, S., Nawari, N., & Kibert, C. J. (2019). Sustainability and resilience: A review of definitions, relationships, and their integration into a combined building assessment framework. *Building and Environment, 154,* 132–144. https://doi.org/10.1016/j.buildenv.2019.02.042
Friday, September 12	Activity	Lecture 4: Environmental and development issues
	Reading	1. Robinson, D., & Igini, M. (2025). *15 biggest environmental problems of 2025*. Earth.Org. https://earth.org/the-biggest-environmental-problems-of-our-lifetime/ 2. National Registry of Environmental Professionals. (2021). *Top 11 environmental sustainability issues we need to address*. NREP. https://www.nrep.org/blog/environmental-sustainability-issues 3. Hickel, J. (2018). *The problem with the Human Development Index in an era of ecological breakdown*. Jason Hickel. https://www.jasonhickel.org/blog/2018/7/5/the-problem-with-the-human-development-index-in-an-era-of-ecological-breakdown 4. Ziai, A. (2017). Post-development 25 years after *The Development Dictionary*. *Third World Quarterly, 38*(12), 2547–2558. https://doi.org/10.1080/01436597.2017.1383853 5. Russell, C. (2016). *Sustainable community development: From what's wrong to what's strong* [Video]. TEDxExeter. YouTube. https://youtu.be/a5xR4QB1ADw
Week 3 Sustainability Ethics and Ecological Economics		
Tuesday, September 16	Activity	Lecture 5: Environmental justice and sustainability ethics
	Reading	1. Environment and Climate Change Canada. (2025). *Environmental justice and environmental racism*. Government of Canada. https://www.canada.ca/en/environment-climate-change/services/strategic-policy-branch/environmental-justice.html 2. Skelton, R., & Miller, V. (2025). *The environmental justice movement*. Natural Resources Defense Council. https://www.nrdc.org/stories/environmental-justice-movement 3. Snorek, J. (2018). Tracking the battles for environmental justice: Here are the world's top 10. *The Conversation.* https://theconversation.com/tracking-the-battles-for-environmental-justice-here-are-the-worlds-top-10-97616

		4. ProPublica. (2017). *A brief history of environmental justice* [Video]. YouTube. https://www.youtube.com/watch?v=30xLg2HHg8Q 5. Fault Lines. (2016, September 21). *Honduras: Blood and the Water* [Video]. Fault Lines via YouTube. https://www.youtube.com/watch?v=5Dbphren7E4
Friday, September 19	Activity	Lecture 6: Economics and the ecosystem
	Reading	1. Raworth, K. (2024). *Doughnut Economics* [Video]. YouTube. https://www.youtube.com/watch?v=u6z12PD53o4 2. Gainsburg, I., Roy, S., & Cunningham, J. L. (2023). An examination of how six reasons for valuing nature are endorsed and associated with pro-environmental behavior across 12 countries. *Scientific Reports, 13,* 8484. https://doi.org/10.1038/s41598-023-34338-x 3. Pascual, U., Balvanera, P., Anderson, C. B., Chaplin-Kramer, R., Christie, M., Díaz, S., … Chan, K. M. A. (2023). Diverse values of nature for sustainability. *Nature, 620* (7976), 813–823. https://doi.org/10.1038/s41586-023-06406-9 4. Haluza-DeLay, R., Kowalsky, N., & Parkins, J. (2009). *How Canadians value nature: A strategic and conceptual review of literature and research* (CSoP Research & Consulting report for Environment Canada). CSoP Research & Consulting. https://www.cbd.int/financial/values/canada-valuinglitreview.pdf
	Assignment	**Assignment 1 due before class (9:30 am, September 19) – 8%**
Week 4 Sustainability Frameworks & Global Practices		
Tuesday, September 23	Activity	Lecture 7: Sustainability and resilience frameworks
	Reading	1. UNDP. (n.d.). *Sustainable development goals*. UNDP. https://www.undp.org/sustainable-development-goals 2. Arup. (2019). *City Resilience Index*. Arup Insights. https://www.arup.com/insights/city-resilience-index/ 3. BDC. (2024). *What is ESG?* BDC. https://www.bdc.ca/en/articles-tools/sustainability/environment/what-esg-and-what-does-mean-business 4. Ernstberger, J. (2023). *Planetary boundaries*. Stockholm Resilience Centre. https://www.stockholmresilience.org/research/planetary-boundaries.html 5. Rockström, J., Gupta, J., Qin, D., et al. (2023). Safe and just Earth system boundaries. *Nature, 619,* 102–111. https://doi.org/10.1038/s41586-023-06083-8

Friday, September 26	Activity	Guest lecture 1: Naomi Hoogervorst (Programme Management Officer, UN-Habitat)
	Reading	1. United Nations, Department of Economic and Social Affairs. (2023). *Global sustainable development report 2023 (Executive Summary)*. United Nations. https://sdgs.un.org/sites/default/files/2023-09/GSD%20Report%202023-Digital%20-Executive%20Summary.pdf 2. Ortiz-Moya, F., & Yang, Y. (2025). Cities' review of the sustainable development goals and insights from voluntary local reviews. *npj Urban Sustainability, 5,* 58. https://doi.org/10.1038/s42949-025-00243-7 3. UN-Habitat. (2018). *Project Assessment Tool* [Video]. YouTube. https://youtu.be/dPAlA-sDPZA?si=7JqdYJs5Nsb_D1WL
Week 5 Sustainable Communities & Planning Strategies		
Tuesday, September 30	No class (National Day for Truth and Reconciliation, University close)	
Friday, October 3	Activity	Lecture 8: Sustainable communities and urban planning
	Reading	1. GoingGreen. (2022, February 4). *Creating sustainable cities* [Video]. YouTube. https://www.youtube.com/watch?v=ViJIJh-BNq8 2. Calthorpe, P. (2017). *7 principles for building better cities* [Video]. TED (TED Conferences). YouTube. https://www.youtube.com/watch?v=IFjD3NMv6Kw 3. Krähmer, K. (2020). Are green cities sustainable? A degrowth critique of sustainable urban development in Copenhagen. *European Planning Studies, 29*(7), 1272–1289. https://doi.org/10.1080/09654313.2020.1841119
	Assignment	**Assignment 2 due before class (9:30 am, October 3) – 8%**
Week 6 Sustainable Buildings and Ecological Design – Part 1		
Tuesday, October 7	Activity	Lecture 9: Building assessment and ecolabels
	Reading	1. U.S. Green Building Council. (2014). *What is LEED?* [Video]. YouTube. https://www.youtube.com/watch?v=tlVseOWToL4 2. U.S. Green Building Council. (n.d.). *LEED v4.1 for Existing Buildings: Rating system overview* [Video]. YouTube. https://www.youtube.com/watch?v=mD_YIqmSjvE 3. Canada. Industry Canada. (2012). *Common environmental labels and claims in Canada: Understanding green claims* (Cat. No. Iu23-35/2012E-PDF; ISBN 978-1-100-20049-1) https://publications.gc.ca/collections/collection_2012/ic/Iu23-35-2012-eng.pdf

Wednesday, October 8	City Futures: Undergraduate Design Research Symposium	
Friday, October 10	Activity	Lecture 10: Building assessment and ecolabels (continued)
	Reading	1. Natural Resources Canada. (2025). *The Canada Green Buildings Strategy: Transforming Canada's buildings sector for a net-zero and resilient future*. Natural Resources Canada. https://natural-resources.canada.ca/energy-efficiency/building-energy-efficiency/canada-green-buildings-strategy-transforming-canada-s-buildings-sector-net-zero-resilient-future 2. Green Building Initiative. https://thegbi.org/ 3. VUNMEI TECH. (2024). *Green building initiative: A sustainable future or just a fad?* [Video]. YouTube. https://youtu.be/Q8mcf9VmUo8 4. Umweltzeichen Blauer Engel. (2018). The "BLUE ANGEL" [Video]. YouTube. https://youtu.be/aHlOXQLmmL0
Week 7 Sustainable Buildings and Ecological Design – Part 2		
Monday, October 13	Thanksgiving Day, University closed	
Tuesday, October 14	Activity	Lecture 11: Materials and life cycle assessment
	Reading	1. National Research Council Canada. (2023). *Low-carbon assets through life cycle assessment initiative*. National Research Council Canada. https://nrc.canada.ca/en/research-development/research-collaboration/programs/low-carbon-assets-through-life-cycle-assessment-initiative 2. Barbhuiya, S., & Das, B. B. (2023). Life cycle assessment of construction materials: Methodologies, applications and future directions for sustainable decision-making. *Case Studies in Construction Materials, 19,* e02326. https://doi.org/10.1016/j.cscm.2023.e02326 3. Spark-sx. (2017). *The principles of life cycle assessment (LCA) 2017* [Video]. YouTube. https://youtu.be/r0ucT1KRiO4
Friday, October 17	Activity	Lecture 12: Indoor environmental quality and building health
	Reading	1. EPA. (2025). *The inside story: A guide to indoor air quality*. U.S. EPA. https://www.epa.gov/indoor-air-quality-iaq/inside-story-guide-indoor-air-quality 2. Twilley, N. (2019). The hidden air pollution in our homes. *The New Yorker*. https://www.newyorker.com/magazine/2019/04/08/the-hidden-air-pollution-in-our-homes 3. Neff, S. (2017). *Erected dysfunction: Our buildings hurt us, but they don't have to* [Video]. TEDx Talks. YouTube. https://youtu.be/h8_Tg5nVnDA

Week 8 Energy, Carbon, and Water		
Tuesday, October 21	Activity	Guest lecture 2 by Dr. Mikhaila Calice, the Executive Assistant to Commissioner at the Public Service Commission of Wisconsin
	Reading	To be posted on D2L
Friday, October 24	Activity	Guest lecture 3 on water issue Lecturer to be announced on D2L
	Reading	To be posted on D2L
Week 9 Climate Change and Adaptation Planning		
Tuesday, October 28	Activity	Lecture 13: Climate change and vulnerability
	Reading	1. IPCC. (2023). *AR6 Synthesis Report: Climate Change 2023*. www.ipcc.ch/report/ar6/syr/ 2. Environment and Climate Change Canada. (2024). *2024–25 Departmental Plan*. Government of Canada. https://www.canada.ca/en/environment-climate-change/corporate/transparency/priorities-management/departmental-plans/2024-2025.html
	Assignment	**Midterm report due before class (9:30 am, October 28) – 20%**
Friday, October 31	Activity	Lecture 14: Adaptation planning
	Reading	1. IPCC. (2022). *Climate Change 2022: Impacts, Adaptation and Vulnerability*. www.ipcc.ch/report/ar6/wg2/ 2. IPCC. (2022). *Impacts, Adaptation and Vulnerability*. www.ipcc.ch/report/ar6/wg2/ 3. EPA. (2023). *Planning for Climate Change Adaptation*. www.epa.gov/arc-x/planning-climate-change-adaptation 4. EPA. (2024). *Climate Adaptation Plans*. www.epa.gov/climate-adaptation/climate-adaptation-plans
Week 10 Indigenous Planning for Sustainable Futures		
Tuesday, November 4	Activity	Guest lecture 4 Lecturer to be announced on D2L
	Reading	1. Deer, K. (2022). *Indigenous peoples have been practicing Sustainable Development Goals for millennia* [Video]. Canadian Friends Service Committee (Quakers). YouTube. https://youtu.be/weqvjZKcUag 2. Tajeddine, J. (2024). *Indigenous wisdom: Leading the path to sustainable practices in Canada*. Earth.Org. https://earth.org/indigenous-wisdom-leading-the-path-to-sustainable-practices-in-canada/
Friday, November 7	Activity	Final project announcement and in-class workshop
	Reading	None
	Assignment	**Assignment 3 due before class (9:30 am, November 7) – 8%**

Week 11 Term Break (from November 9 to 15)		
Tuesday, November 11	Activity	No class meeting
	Reading	None
Tuesday, November 14	Activity	No class meeting
	Reading	None
Week 12 AI Applications in Sustainability Research		
Tuesday, November 18	Activity	Lecture 16: Urban Planning AI
	Reading	1. Peng, Z.-R., Lu, K.-F., Liu, Y., & Zhai, W. (2024). The pathway of urban planning AI: From planning support to plan-making. Journal of Planning Education and Research, 44(4), 2263–2279. https://doi.org/10.1177/0739456X231180568
Friday, November 21	Activity	Guest lecture by Dr. Wei Zhai (Associate Professor, University of Texas, Arlington)
	Reading	None
	Assignment	**Assignment 4 due before class (9:30 am, November 21) – 8%**
Week 13 Final Project Preparation and Presentation		
Tuesday, November 25	Activity	Final presentation in-class workshop
	Reading	None
Friday, November 28	**Activity**	**Final presentation 1**
	Reading	None
	Assignment	**Final presentation slides due (9:30 am, November 28) – 10%**
Week 14 Final Project Preparation and Presentation		
Tuesday, December 2	**Activity**	**Final presentation 2**
	Reading	None
Friday, December 5	Activity	Final project in-class workshop (Last day of classes)
	Reading	None
Week 15 & 16 Final Project		
Friday, December 12	**Assignment**	**Assignment 5 due (11:59 pm) – 8%**
Monday, December 15	**Assignment**	**Final project report due (11:59 pm) – 30%**

Note: this schedule may be subject to change. Changes will be communicated through announcements on D2L.

Scheduled Out-of-Class Activities:

There are no scheduled out-of-class activities for this course.

University of Calgary Policies and Supports:

UNIVERSITY OF CALGARY COVID-19 UPDATES AND PROCEDURES

https://www.ucalgary.ca/risk/emergency-management/covid-19-response/covidsafe-campus

ACADEMIC ACCOMMODATION

https://ucalgary.ca/student-services/access/prospective-students/academic-accommodations

It is the student's responsibility to request academic accommodations according to the University policies and procedures listed below. The student accommodation policy can be found at: https://www.ucalgary.ca/legal-services/university-policies-procedures/student-accommodation-policy

Students needing an accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities: https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Accommodation-for-Students-with-Disabilities-Procedure.pdf

Students needing an accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a Protected Ground other than Disability, should communicate this need, preferably in writing, to their instructor (contact information on first page above).

Student Accessibility Services will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit www.ucalgary.ca/access/.

ACADEMIC MISCONDUCT

Academic Misconduct refers to student behavior which compromises proper assessment of a student's academic activities and includes: cheating; fabrication; falsification; plagiarism; unauthorized assistance; failure to comply with an instructor's expectations regarding conduct required of students completing academic assessments in their courses; and failure to comply with exam regulations applied by the Registrar.

For information on the Student Academic Misconduct Policy and Procedures please visit:

- Student Academic Misconduct Policy: https://www.ucalgary.ca/legal-services/university-policies-procedures/student-academic-misconduct-policy
- Student Academic Misconduct Procedure: https://www.ucalgary.ca/legal-services/university-policies-procedures/student-academic-misconduct-procedure

Additional information is available on the Academic Integrity Website at https://www.ucalgary.ca/student-services/student-success/learning/academic-integrity.

COPYRIGHT LEGISLATION

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (https://www.ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy) and requirements of the Copyright Act (https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html) to ensure they are aware of the consequences of unauthorised sharing of course materials (including instructor notes, electronic versions of textbooks, etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy (https://www.ucalgary.ca/legal-services/university-policies-procedures/student-non-academic-misconduct-policy).

Notice to Students Regarding Use of Generative Artificial Intelligence (AI) Applications and Tools in Learning Environments

- General rule: Unrestricted use (with accountability). Students may use generative AI tools in this course unless an assignment explicitly states otherwise.
- Learning support: Students are encouraged to use generative AI tools to study new concepts and during open discussion.
- Assignments: Students may use generative AI tools to brainstorm, outline, draft, edit, check logic, and improve clarity. However, students are fully responsible for the accuracy, originality, and integrity of all submitted work.
- Sources and data: Students must rely on credible, verifiable sources for data, evidence, and literature, and must not use AI-fabricated citations. All sources consulted must be cited.
- Transparency: Students must include a brief AI use statement on any work that used generative AI (see template below).
- AI Use Declaration (paste and adapt): During the preparation of this work, I used [tool name, e.g., ChatGPT] for [e.g., outlining, clarifying concepts, proofreading]. I reviewed and edited all content, verified all sources and citations, and take full responsibility for the submitted work."

INSTRUCTOR INTELLECTUAL PROPERTY

Course materials created by instructors (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the instructor. These materials may NOT be reproduced, redistributed or copied without the explicit consent of the instructor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

PROTECTION OF PRIVACY ACT

The University of Calgary (University) respects your privacy and is committed to ensuring the privacy of all students, staff, and community members. UCalgary's collection, use, and disclosure of your personal information is authorized under section 4(c) of the Alberta Protection of Privacy Act (POPA). It will be collected, used and disclosed as permitted under POPA and in accordance with the University's Privacy Policy and Notice of Collection, Use and Disclosure of Student Personal Information. All student assignments and personal information provided to your course instructor will remain confidential

unless otherwise stated before submission. It will not be disclosed to anyone else without your permission unless permitted under POPA.

SEXUAL AND GENDER-BASED VIOLENCE POLICY

The University recognizes that all members of the University Community should be able to learn, work, teach and live in an environment where they are free from harassment, discrimination, and violence. The University of Calgary's Sexual and Gender-Based Violence Policy guides us in how we respond to incidents of sexual and/or gender-based violence, including supports available to those who have experienced or witnessed sexual/gender-based violence, or those who are alleged to have committed sexual/gender-based violence. It provides clear response procedures and timelines, defines complex concepts, and addresses incidents that occur off-campus in certain circumstances. Please see the policy available at https://www.ucalgary.ca/legal-services/university-policies-procedures/sexual-and-gender-based-violence-policy.

UNIVERSITY STUDENT APPEALS OFFICE

If a student has a concern about a grade that they have received, they should refer to Section I of the Undergraduate Calendar (https://calendar.ucalgary.ca/uofcregs/university-regulations/reappraisal-term-work) which describes how to have a grade reappraised.

OTHER IMPORTANT INFORMATION

Please visit the Registrar's website at https://www.ucalgary.ca/registrar/registration/course-outlines for additional important information on the following:

- Wellness and Mental Health Resources
- Student Success
- Student Ombuds Office
- Student Union (SU) Information
- Graduate Students' Association (GSA) Information
- Emergency Evacuation/Assembly Points
- Safewalk