EDUC 460.09 S01 Specialization I: Elementary Science
Winter 2025

Class Dates: January 13th – March 14th, 2025

Last Day to Add/Drop/Swap: Due to the non-standard dates associated with this program, please check your Student Centre for the important dates pertaining to your section.

Pre-requisite: Due to the multiple pathways in the Bachelor of Education, please consult Undergraduate Programs in Education for questions related to pre-requisite courses.

Email: Students are required to use a University of Calgary (@ucalgary.ca) email address for all correspondence. **Please, always add "[EDUC 460]" in the subject line of your e-mail so I can prioritize your communication (ex. "[EDUC460] Learning Task 1 question").**

Office Hours: Available after class or by appointment. Office hours will be held primarily on zoom unless otherwise necessary.

Course design and deliverables: This online course is delivered through a problem-based and inquiry-focused approach. Student participation is crucial to the knowledge building in this course. While there are, of course, readings, they don't "contain" the knowledge of this course. Your learning will be primarily through applying concepts from the readings while you experience, design and critique science learning activities. Assessment is based on rubrics for the three Learning Tasks. D2L will be used to post class information and for submitting assignments.

Land Acknowledgement: The University of Calgary, located in the heart of Southern Alberta, both acknowledges and pays tribute to the traditional territories of the peoples of Treaty 7, which include the Blackfoot Confederacy (comprised of the Siksika, the Piikani, and the Kainai First Nations), the Tsuut'ina First Nation, and the Stoney Nakoda (including Chiniki, Bearspaw, and Goodstoney First Nations). The City of Calgary is also home to the Métis Nation of Alberta (Districts 5 and 6).

COURSE DESCRIPTION: The intent of the Specialization I Seminar is to introduce students to the concepts, theory, and design planning related to teaching within the specializations of Science. Theory as connected to an understanding of practical classroom experiences will particularly inform the course curriculum and will be explored through course readings, analysis of teaching/learning artifacts, and through the design of discipline-based learning and assessment plans. Topics in teaching and learning will include teaching inclusively and addressing the needs of diverse learners, effective integration of technology, and discipline-based inquiry. Assignments will present the opportunity for students to develop an understanding of short-term instructional designs and to begin to examine curriculum shifts in the province.
Learner Outcomes: Over the course of the semester, students will:

1. Develop a foundational understanding of the nature of discourse in the discipline, as related to teaching and learning, including specialized language, concepts, and terminology;
2. Understand teacher as designer of learning and assessment plans, and use of the resources available for designing learning and assessment.
3. Explore and apply introductory theory related to the teaching of the discipline of Science with an emphasis on: designing discipline-based tasks and assessment processes and creating an adaptive classroom learning environment to better meet the needs of today's diverse learners.
4. Successfully design short-term learning and assessment plans to deepen understanding of key ideas/concepts within the discipline.

Required Resources: All required resources can be found in the weekly schedule. Additional class readings and other support resources will be posted on the course shell in D2L prior to class. It is your responsibility to keep up with materials and announcements posted on D2L.

Generative AI: Course participants are invited to use artificial intelligence tools, including generative AI, to gather information, review concepts, and/or to help create Learning Task outlines. However, (1) it is the student's responsibility to inform the instructor in writing of the intention to use such technology in advance of its use; (2) the student is ultimately accountable for the work they submit; (3) any content generated or supported by an artificial intelligence tool must be cited appropriately; and (4) the instructor reserves the right to deny any uses of generative AI determined to be harmful or against the goals of learning. It is the student's responsibility to be clear on the limitations on the use of generative AI tools for each task or assessment, on the expectations for citation and referencing, and on fact checking statements created by generative AI tools. If you are in doubt as to the use of generative AI tools in this course, please discuss your situation with the course instructor. Misuse of these tools will be considered academic misconduct and will be treated as such.

Learning Tasks Overview:

	DESCRIPTION OF LEARNING TASK	GROUPING	WEIGHT	DUE DATE
#1	Science Teaching Resource Evaluation	Individual	30%	Feb. 14
#2	Design of a Short-term Learning Plan (Lesson Plan)	Individual & Group	40%	Mar. 14
#3	Evolving Conceptual Understanding of Science	Individual	30%	Mar. 14

Tentative Schedule of weekly activities/readings (topics, activities, and readings subject to change to meet the emerging needs and dynamics of the participants in the course.)

Dates & Themes	Daily Topics	Readings and Learning Tasks
Week 1 - January 13 and 17 **Introductions and Fundamentals of Teaching Elementary Science**	**Monday:** Welcome & Introductions Course Overview **Friday:** Students Understanding in Science Goals of Teaching Science	**Monday:** **Be generally familiar with:** 1. Alberta Science Programs of Study. https://www.learnalberta.ca/ProgramsOfStudy.aspx?lang=en&posLang=en&Core=Science and https://education.alberta.ca/science-10-12/programs-of-study/ **Friday:** **Required Reading** 2. Fitzgerald, A., & Smith, K. (2016). Science that matters: Exploring science learning and teaching in primary schools. *Australian Journal of Teacher Education*, *41*(4), 4. http://ro.ecu.edu.au/cgi/viewcontent.cgi?article=2892&context=ajte 3. Hanuscin, D.L. & Lee, E.J. (2013) Ch. 1 Helping Students Understand the Nature of Science. In Hanuscin, D. L., & Rogers, M. P. (Eds.). (2013). *Perspectives: Research & Tips to Support Science Education, K-6*. NSTA Press. https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?docID=1416110&ppg=16
Week 2 - January 20 and 24 **Teaching approaches in Elementary Science**	**Monday:** Elementary Science Learning Theories **Friday:** Outdoor Learning Day Evidence at the Elementary Level	**Monday:** **Required Reading** 1. Robertson, B. (2018). Q: How do we best teach and learn science concepts? *Science and Children, 55*(9), 69-75. http://ezproxy.lib.ucalgary.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=130365445&site=ehost-live **Friday:** **Required Reading** 2. Hanuscin, D.L. & Park Rogers, M. (2013) Learning to observe and infer. In Hanuscin, D. L., & Rogers, M. P. (Eds.). (2013). *Perspectives: Research & Tips to Support Science Education, K-6*. NSTA Press. https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-

		[ebooks/reader.action?docID=1416110&ppg=20](#)
Week 3 - January 27 and 31 **Interdisciplinary Science Teaching**	**Monday:** Science vs STEM vs STEAM **Friday:** Whole-Body Learning of Science	**Monday:** **Required Reading** [Skimming] 1. Education - STEM & STEAM Education Research Guide. (2024). [https://libguides.ucalgary.ca/c.php?g=255548&p=1702130](#) **Friday:** **Required Reading** 2. The Kennedy Center. (n.d.). *Arts integration in practice: Science*. The Kennedy Center. [https://www.kennedy-center.org/education/resources-for-educators/classroom-resources/articles-and-how-tos/articles/collections/arts-integration-resources/arts-integration-in-practice-science/](#) 3. Manches, A., & Mitchell, E. (2023). Embodied Learning for early and primary science: Key implications from the Move2Learn project. *Journal of Emergent Science*, *24*, 23-32. [https://www.ase.org.uk/system/files/Manches.pdf](#)
Week 4 - February 3 and 7 **Creation of Short-term Learning Plan (aka lesson planning)**	**Monday:** Strategies in Elementary Science **Friday:** Making Lesson Plans	**Monday:** **Required Reading** [Pick one and read before class]. 1. Ch. 5 - Using children's literature, stories, poetry and songs. In Cross, A., & Board, J. (2014). *Creative ways to teach primary science*. McGraw-Hill Education (UK). [https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?docID=1920720&ppg=63](#) 1. Ch. 6 – Models and analogies. In Cross, A., & Board, J. (2014). *Creative ways to teach primary science*. McGraw-Hill Education (UK). [https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?docID=1920720&ppg=78](#) 1. Ch. 8 – Demonstrations. In Cross, A., & Board, J. (2014). *Creative ways to teach primary science*. McGraw-Hill Education (UK). [https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-](#)

		ebooks/reader.action?docID=1920720&ppg=106
		1. Ch. 9 – Dance and drama. In Cross, A., & Board, J. (2014). *Creative ways to teach primary science*. McGraw-Hill Education (UK). https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?docID=1920720&ppg=120
		1. Ch. 10 – Playground science. In Cross, A., & Board, J. (2014). *Creative ways to teach primary science*. McGraw-Hill Education (UK). https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?docID=1920720&ppg=132
		1. Ch. 11 – Thinking frames. In Cross, A., & Board, J. (2014). *Creative ways to teach primary science*. McGraw-Hill Education (UK). https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?docID=1920720&ppg=143
		Friday:
		Required Reading
		2. Brown, P.L., & Abell, S.K. (2013). Ch. 5 Examining the Learning Cycle. In Hanuscin, D.L., & Park Rogers, M. (2013). *Perspectives: Research and Tips to Support Science Education, K-6.* Arlington, VA: National Science Teachers Association http://ezproxy.lib.ucalgary.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=130365445&site=ehost-live
Week 5 – February 10 and 14 **LT1 Showcase**	**Monday:** In-Class Work Time Identify and Critique Key Learning Perspectives in the Alberta Program of Studies **Friday:**	**Monday:** **Required Reading** None **Friday:** **Required Reading** None **Learning Task 1 Due Friday, February 14th - 30%**

	Showcase of Resources	
Term Break – February 17 and 21		
Week 6 – February 24 and 28 **Inquiry and exploration in science**	**Monday:** Science and Engineering at the Elementary Level **Friday:** Science Activities	**Monday:** **Required Reading** 1. Lachapelle, C.P., Sargianis, K., & Cunningham, C.M. (2013). Engineer it, learn it: science and engineering practices in action. *Science and Children*, *51*(3), 70-76. http://ezproxy.lib.ucalgary.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=91710125&site=ehost-live 2. Keeley, P. (2020). "Doing" science vs. "doing" engineering. *Science and Children, 57*(6), 16-18. https://ezproxy.lib.ucalgary.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=141705443&site=ehost-live **Friday:** **Required Reading** None
Week 7 – March 3 and 7 **Assessment and Inclusion in Science**	**Monday:** Assessment of Elementary Science **Friday:** Inclusion in Elementary Science	**Monday:** **Required Reading** 1. Hanuscin, D., & Park Rogers, M. (Eds.). (2013). Perspectives: Research and tips to support science education, K-6. National Science Teachers Association. https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/detail.action?docID=1416110 Ch. 16 – Lee, M.H., & Abell, S.K. (2013). Assessing for science Learning. https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?docID=1416110&ppg=78 2. Keeley, P. (2017). Embedding formative assessment into the 5E instructional model. Science and Children, 55(4), 28-31. http://ezproxy.lib.ucalgary.ca/login?url=http://search.ebscohost.com/login.aspx?direct=t

		rue&db=sch&AN=126367653&site=ehost-live **Friday:** **Required Reading** 1. Science with Mrs. Lau. (2018). Ten Tips for Teaching ELL Science. https://www.scienceandmathwithmrslau.com/2017/09/ten-tips-teaching-ell-science/ 2. Lappe, G. & Dwyer, K. (2021). Using ELL Strategies in the Science Classroom. https://www.edutopia.org/article/using-ell-strategies-science-classroom/
Week 8 – March 10 and 14 **Course Completion**	**Monday:** In class work time Identify and critique key learning perspectives in the Alberta Program of Studies **Friday:** Showcase of Learning Plans	**Learning Task 2 Due Friday, March 14th - 40%** **Learning Task 3 Due Friday March 14th, - 30%**

Learning Tasks
The course is structured around the completion of three Learning Tasks. The Learning Task descriptions and assessment details will be discussed in class. The instructor will facilitate the ongoing work and will support students as they engage in the Learning Tasks by providing ongoing, timely and constructive feedback to further learning.

I. Learning Task 1: Science Teaching Resource Evaluation, 30%, Due: Friday, February 14th
For this Learning Task, students will choose an Elementary Science Teaching Resource available either through the Doucette Library or openly available to evaluate. The resources chosen for this Learning Task should emerge from class activities, engagement with peers & class readings, and should be connected to the development of the Short-Term Learning Plans (Learning Task 2). Students will evaluate the resources through research into theories of teaching & learning within the discipline and through peer discussion of personal experiences and observations. The choice of resources for this Learning Task are up to each individual student based on their own interests.

Artifacts produced in Learning Task 1 will be shared electronically via a D2L Discussion Board on the date due as well as in a class showcase. The D2L post can include text, visuals, media, links, or any other medium allowed by D2L. Students should be creative in the development of this post. Submission components for the **Science Teaching Resource Evaluation** will include:

1. A <u>starting</u> explanation of your chosen Elementary Science Teaching Resource including a clear description of the resource, an explanation of what makes it a Science Teaching Resource for the elementary level, and a statement of how the resource may be used for teaching within the Alberta Science Curriculum.
2. A <u>brief</u> summary of your thoughts as a developing teacher on your chosen resource as well as new or further questions raised as a result of your learning. Include a digital collection illustrating your developing thoughts through the process of exploring your resource. You can create these and/or share existing links or examples (where copyright permits). The connection to your resource should be made clear.
3. A list of resources used in the project completion (APA 7th edition).
4. Two responses to posts by classmates on D2L of your own thoughts on their resource as a developing teacher.

Criteria for Assessment of Learning Task 1

For Learning Task 1, you will be assessed based on the following criteria (which will be expanded on in a rubric posted to D2L):

1. Quality and meaningfulness of Elementary Science Teaching Resource and resources used in investigation

- Elementary Science Teaching Resource is described clearly, insightfully, and completely.
- Elementary Science Teaching Resource is clearly connected to the Alberta Science Curriculum.
- Elementary Science Teaching Resource is meaningful to teaching elementary science.
- Evaluation demonstrates an emerging understanding of concepts and theories related to the teaching of the discipline.
- Submission includes at least 3 peer reviewed references.

2. Overall Presentation of Elementary Science Teaching Resource

- Elementary Science Teaching Resource is presented in an organized, clear, and succinct way.
- Thoughts as a developing teacher are presented with "I statements" and demonstrate a growing understanding of science teaching.
- Resources are cited correctly and embedded when relevant.

3. Quality of responses to classmates

- Responses to peers are thoughtful and representative of a growing teacher identity.

II. Learning Task 2: Design of a Short-term Learning Plan (Lesson Plan), 40%, Due: Friday, March 14th

For this Learning Task, students will work in small groups to design a set of Short-Term Learning Plans that are illustrative of key aspects of curriculum and educational research introduced in the course. Students will then present on their set of Short-Term Learning Plan designs as a group in order to build the collective teacher toolbox of the class. Students will form groups for this task based on overlaps between their chosen Science Teaching Resources submitted for Learning Task 1. These Short-Term Learning Plans may take any form chosen by the groups/individuals (such as around a specific project, a unit as distinguished in the Alberta Programs of Study, or other design choice). The learning design and the theoretical framework supporting it will be posted on D2L for analysis and "feedforward" suggestions from members of the class.

Artifacts of Learning Task 2 will be submitted individually, shared electronically via a digital folder to be uploaded on D2L on the date due. This post can include text, visuals, media, links, or any other medium allowed by D2L. Submission components for the **Design of a Short-Term Learning Plans** will include:

1. An individual component: You will individually design a Short-Term Learning Plan for learning and assessment to foster deep understanding of science at the elementary level. Submission of this plan will be in the form of a .doc AND a .pdf file submission based on a provided (or approved) template. Components of this submission will include a rationale for the learning plan, as supported by theory and discipline discussed in and beyond the course, discussion of practicalities of enacting this Learning Plan (i.e. how it fits it into a larger context/concept), and consideration for integration of effective formative assessment strategies for scaffolding/learning progression and adapting to the needs of diverse learners.

2. A group component: You will present on your set of individually created Short-Term Learning Plans to the full class in order to build up a collective teacher toolbox. Presentations will be a 15- 20 minutes long (depending on group size) and will be shared electronically via D2L Discussion Board in-class right before each presentation

Criteria for Assessment of Learning Task 2

For Learning Task 2, you will be assessed based on the following criteria (which will be expanded on in a rubric posted to D2L):

1. Quality of unit structure
   - Learning plans cover the entirety of a single lesson of elementary or middle school instruction (90-minute daily class) with direct connections to the Alberta Science Curricula.
   - Considerations are embedded of required prior content knowledge, skills, or other considerations for the lesson/activities.
   - Assessment opportunities (formative and summative) are embedded throughout the lesson design with clear expectations for students

2. Recognition of diversity
   - Learning plan includes considerations of accessibility and understanding inclusion within school systems.
   - Learning plan includes opportunities for discussion of multiple ways of knowing.

3. Overall Presentation of Learning Plan
   - Learning Plan is presented in an organized, clear, and succinct way.
   - Resources are cited correctly and embedded when relevant.

4. Group Presentation of Learning Plan
   - Presentation is organized, clear, and succinct.
   - All members of the small discussion group contribute equally (as agreed upon by the group).
   - Learning plans are presented in ways that other classmates might be able to adapt them into their own teaching.
   - Learning plans are presented in ways that are accessible to classmates with other disciplinary backgrounds than those of the presenters.
   - Resources are cited correctly and embedded when relevant.

III. Learning Task 3: Evolving Conceptual Understanding of Science, 30% Due Friday, March 14ᵗʰ

For this Learning Task, students will respond to the prompt of "**Your changing conceptualization of science**" as way of reflecting thoughtfully on the pedagogical content knowledge in their subject area. Responses may take a number of forms, such as: an academic essay, an imagined Socratic dialogue between a teacher and student, an illustrated story, an animation, a short video or podcast, or other approved model. However, all responses must be persuasive – that is, students must fashion a personal stance on the prompt and then set out to persuade the reader of their interpretation using *relevant and varied evidence.* At a minimum, all responses must refer to the Alberta Education Programs of Study and at least 3 articles or chapters read during the course. In addition to these sources, you may also want to draw upon discussions in your class inquiry groups, additional readings from this and other courses, and observations made during your field experiences.

Artifacts of Learning Task 3 will be submitted individually, shared electronically via a digital folder to be uploaded on D2L on the date due. This post can include text, visuals, media, links, or any other medium allowed by D2L. Submission components for the **Evolving Conceptual Understanding of Science Task** will include:

1. You will submit a single file, link to a webpage, or folder submission of whatever you chose to create as your response to the prompt.

Criteria for Assessment of Learning Task 3

For Learning Task 3, you will be assessed based on the following criteria (which will be expanded on in a rubric posted to D2L):

1. Quality of Argument
   - Argument is articulated clearly, insightfully, and persuasively.
   - Argument demonstrates an emerging understanding of concepts and theories related to the teaching of the discipline.
   - Submission includes at least 3 peer reviewed references.

2. Overall Presentation of Submission
   - Submission is presented in an organized, clear, and succinct way.
   - Submission uses an appropriate mode of expression for the argument being made.
   - Resources are cited correctly and embedded when relevant.

The Expectation of Excellence in Professional Work

Please review the Academic Calendar carefully. It describes the program and provides detailed schedules and important dates. It contains information on expectations for student work and professional conduct. In addition, procedures are described regarding concern about student performance in the program. Please pay especially careful attention to details and descriptions in the following topic areas:

- *The Importance of Attendance and Participation in Every Class*

As this is a professional program, experiences are designed with the expectation that all members will be fully involved in all classes and in all coursework experiences. As you are a member of a learning community your contribution is vital and highly valued, just as it will be when you take on the professional responsibilities of being a teacher. We expect that you will not be absent from class with the exception of documented instances of personal or family illness or for religious requirements.

- *Engagement in Class Discussion and Inquiry*

Another reason for the importance of attendance and participation in every class is that the course involves working with fellow students to share ideas and thinking. For example, each class you will work with a small group to engage fellow students in discussions on work being considered in class. You will also help other groups by providing ideas for scholarly inquiry in Learning Tasks. If you find that you are experiencing difficulties as a group collaborating, please inform the instructor.

Expectations for Writing
All written Learning Tasks (including, to a lesser extent, written exam responses) will be assessed at least partly on writing skills. Writing skills include not only surface correctness (grammar, punctuation, sentence structure, etc.) but also general clarity and organization. Sources used in research papers must be properly documented. If you need help with your writing, you may use the writing support services in the Learning Commons. For further information, please refer to the official online University of Calgary Calendar, Academic Regulations, E. Course Information, E.2: Writing Across the Curriculum:
http://www.ucalgary.ca/pubs/calendar/current/e-2.html

Late Submissions
All late submissions of Learning Tasks must be discussed with the instructor **prior to the due date.** A deferral of up to 30 days may be granted at the discretion of the Associate Dean of Undergraduate Programs prior to the end of the course with accompanying written evidence

Issues with Group Tasks

With respect to group work, if your group is having difficulty collaborating effectively, please contact the instructor immediately. If a group is unable to collaborate effectively or discuss course materials online in a timely manner, the instructor may re-assign members to different groups or assign individual work for completion.

GRADING (https://calendar.ucalgary.ca/pages/fc4adb8643f84441ab32300237b80df1):

Grade	GPA Value	%	Description per U of C Calendar
A+	4.0	95-100	Outstanding
A	4.0	90-94	Excellent – Superior performance showing comprehensive understanding of the subject matter
A-	3.7	85-89	
B+	3.3	80-84	
B	3.0	75-79	Good - clearly above average performance with knowledge of subject matter generally complete
B-	2.7	70-74	
C+	2.3	65-69	
C	2.0	60-64	Satisfactory - basic understanding of the subject matter
C-	1.7	55-59	
D+	1.3	52-54	Minimal pass - Marginal performance
D	1.0	50-51	
F	0.0	49 and lower	Fail - Unsatisfactory performance

Academic Accommodation

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

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 fulfill requirements for a graduate degree based on a Protected Ground other than Disability, should communicate this need, preferably in writing, to the designated contact person in their faculty. The course outline should clearly list the appropriate Faculty contact person(s) and

their contact details. For further information see E.1 C. Course Policies and Procedures
https://calendar.ucalgary.ca/pages/a89ecfbf758841b5983c4b67746e7846

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 Procedure please visit:
https://www.ucalgary.ca/legal-services/university-policies-procedures/student-academic-misconduct-policy
https://www.ucalgary.ca/legal-services/university-policies-procedures/student-non-academic-misconduct-policy

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

Research Ethics

Students are advised that any research with human participants – _including any interviewing (even with friends and family), opinion polling, or unobtrusive observation – _must have the approval of the Conjoint Faculties Research Ethics Board
(https://research.ucalgary.ca/conduct-research/ethics-compliance/human-research-ethics/conjoint-faculties-research-ethics-board-cfreb) or the Conjoint Health Research Ethics Board https://research.ucalgary.ca/conduct-research/ethics-compliance/human-research-ethics/conjoint-health-research-ethics-board-chreb)

In completing course requirements, students must not undertake any human subjects research without discussing their plans with the instructor, to determine if ethics approval is required. Some courses will include Learning Tasks that involve conducting research with human participants; in these cases, the instructor will have applied for and received ethics approval for the course Learning Task. The instructor will discuss the ethical requirements for the Learning Task with the students.

For further information see E.5 Ethics of Human Studies
https://calendar.ucalgary.ca/pages/627ed88eb4b041b7a2e8155effac350

Instructor Intellectual Property
Course materials created by instructors (including presentations and posted notes, labs, case studies, Learning Tasks 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.

Freedom of Information and Protection of Privacy
Student information will be collected in accordance with typical (or usual) classroom practice. Students' Learning Tasks will be accessible only by the authorized course faculty. Private information related to the individual student is treated with the utmost regard by the faculty at the University of Calgary. For more information, please see:
https://www.ucalgary.ca/hr/work-compensation/working-ucalgary/freedom-information-and-privacy-act

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.

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 violence policy guides us in how we respond to incidents of sexual violence, including supports available to those who have experienced or witnessed sexual violence, or those who are alleged to have committed sexual 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

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

The Freedom of Information Protection of Privacy Act prevents instructors from placing Learning Tasks or examinations in a public place for pickup and prevents students from access to exams or Learning Tasks other than their own. Therefore, students and instructors may use one of the following options: return/collect Learning Tasks during class time or during instructors' office hours, students provide instructors with a self-addressed stamped envelope, or submit/return Learning Tasks as electronic files attached to private e-mail messages.

For additional resources including, but not limited to, those aimed at wellness and mental health, student success or to connect with the Student Ombuds Office, please visit https://www.ucalgary.ca/registrar/registration/course-outlines

Education Students Association (ESA) President for the academic year is Claire Gillis, esa@ucalgary.ca.

Werklund SU Representative is Tracy Dinh, educrep@su.ucalgary.ca.