

EDUC 305: Inside Mathematics (MATH 305)
Winter, 2026*Erin Spring*

Section information (times, class location, instructor) can be found in your my.ucalgary.ca portal.

Your instructor will also confirm section information through your D2L course shell.

Please check these sites prior to the start of the course.

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 within Alberta (including Nose Hill Métis District 5 and Elbow Métis District 6).

Lecture Dates: January 12 – April 14, 2026

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.

Office Hours: By appointment only

Email: Students are required to use a University of Calgary (@ucalgary.ca) email address for all correspondence.

COURSE DESCRIPTION:

Through an exploration of the usually-tacit elements of mathematical concepts and processes, the course focuses on strategies for unpacking concepts and for sustained engagement in inquiry.

This course may not be repeated for credit.

This course will be co-taught by scholars from the Faculty of Science and Werklund School of Education.

Tutorials are offered to support students with the content related to the course.

Pre-requisites: Mathematics 211 or 213; and 271 or 273.

LEARNER OUTCOMES:

By the end of this course, students are expected to be able to

- analyze mathematical concepts, identifying associations (e.g., metaphors, images, exemplars) that render concepts comprehensible and useful;

- investigate the role of context (natural, social, cultural, political, and historical) in the emergence of mathematical concepts to formulate an explanation of how cultural circumstances enable and constrain the development of mathematical insights;
- perform arithmetic and algebraic operations and prove mathematical results related to the content of the course, including complex numbers, constructions of number systems, and functions;
- ask mathematical questions that sustain engagement in mathematical inquiry; and
- communicate mathematical ideas and arguments accurately to diverse audiences (e.g. school students, adults and mathematicians).

Elaborated Description

For centuries, both mathematical inquiry and mathematics learning have been assumed to be principally logical. However, recent studies of the processes of human cognition and the nature of mathematical insight have revealed that mathematics learning and mathematics research are highly analogical. Moreover, the specific analogies that are made available can either help or hinder the development of mathematical knowledge – a point that is true on individual, social, and cultural levels.

Oriented by that realization, this course is concerned with what lurks “inside” mathematical concepts and processes. To explain, the work of mathematicians is often characterized in terms of converting ideas into highly condensed representations, in large part to facilitate further mathematical exploration. However, while these condensed formulations enable more powerful mathematical thought, they can present unique challenges to learners. In particular, much of mathematics learning must be about unpacking or decompressing concepts – that is, separating and then reblending the elements that mathematicians have assembled into comprehensible and useful constructs.

This course focuses mainly on strategies for packing and unpacking concepts, and it situates these strategies within mathematical inquiry. The course has three intertwining emphases:

1) Concept Study

Concept study involves tracing the associations that render a concept meaningful. It can involve examinations of the origins and applications of a concept, explorations of the representations (e.g., metaphors, images, exemplars) used to describe it, and surveys of other concepts in its mathematical neighborhood. Concept study is focused in particular on the analogical aspects of mathematics concepts – for two reasons. Firstly, analogies are the principal mechanism of human thought, and so being attentive to these associations can aid understanding and insight. Secondly, analogies always bring along unwanted baggage, and so being aware when thinking is analogical (versus logical) can be useful for avoiding unwarranted generalizations.

This emphasis of the course will be developed through instructor-led studies of concepts that include: number, limits, and functions.

2) Cultural Framing of Mathematics

There is a popular belief that mathematical knowledge is culture free. However, when considered historically, the field has clearly evolved with society, affecting and affected by popular beliefs and assumptions, political climates, technological possibilities, and other contextual factors.

Maintaining the course focus on the concepts of number, limits, and function, this emphasis of the course will be developed by examining a few key cultural shifts (e.g., the sudden rejection of a prevailing metaphor, or a new blending of multiple instantiations) that opened up new mathematical horizons.

3) Mathematical question asking

“Mathematics,” for most people, is about finding answers – whether by following formal procedures or engaging in more flexible problem solving.

Among research mathematicians, however, the enterprise is not so oriented toward end points. Rather, mathematical research is typically more about keeping the inquiry going. New insights always open up new questions. The following are among the activities that are commonly invoked to sustain mathematical inquiry:

- making conjectures,
- making and refining definitions,
- hypothesis testing and modeling,
- extending and generalizing, and
- justifying, validating, and proving

This emphasis of the course will be developed through sustained engagement with mathematical problems associated with the themes of the collective concept studies (i.e., number, limits, and functions).

COURSE DESIGN AND DELIVERY: This course will be delivered face-to-face on campus with active engagement in a D2L environment. Students will require access to a computing device that contains current software and hardware capable of running D2L. If you do not own a personal device, there are computers available for student use in the Doucette Library and the Taylor Family Digital Library. Formative assessment is embedded in the course: You will be required to provide early drafts of some assignments for feedback.

Please note that all assignments are expected to be the original work of the student and students may only use generative AI (GAI) tools for word processing functions, such as grammar and spell checking (e.g. Grammarly, CoPilot). It is not required to document the use of the above GAI for the purposes described. If you have questions about a specific use of other GAI tools, please contact your instructor.

REQUIRED RESOURCES:

Andreescu, T., & Andrica, D. (2014). *Complex Numbers from A to ... Z* (2nd ed. 2014.). Birkhäuser Boston.
https://ucalgary.primo.exlibrisgroup.com/permalink/01UCALG_INST/46139d/alma991028055306304336

Mason, J., Burton, L., & Stacy, K. (2010). *Thinking Mathematically* (2nd Edition, Chapters 1 to 4). New York: Prentice Hall. First two chapter available online:
<https://www.pearsonhighered.com/assets/samplechapter/m/a/s/o/Mason - Chapter 1.pdf>
<https://www.pearsonhighered.com/assets/samplechapter/m/a/s/o/Mason - Chapter 2.pdf>
Full text available in e-book format for instant download at Amazon Kindle:
https://www.amazon.ca/dp/B08H3XW9J4?ref=KC_GS_GB_CA

Mazur, B. (2003). *Imagining numbers (particularly the square root of minus fifteen)*. New York: Penguin books.
https://ucalgary.primo.exlibrisgroup.com/permalink/01UCALG_INST/46139d/alma991024789749704336
[Amazon Kindle](#) ; [Google Play Books](#) ; [Kobo](#) ; [ebooks.com](#) ; [iBooks](#) ; [RedShelf](#)

Núñez, R., & Marghetis T. (2014). *Cognitive Linguistics and the Concept (s) of Number*. In R. C. Kadosh & A. Dowker (Eds.), *The Oxford Handbook of Numerical Cognition* (pp. 377 – 401). Oxford, UK: Oxford

University Press. <https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?docID=2095058&ppg=408>

ADDITIONAL RESOURCES:

- Cajori, F. (1980). *A history of mathematics*. 3d ed. New York: Chelsea Pub. Co.
https://ucalgary.primo.exlibrisgroup.com/permalink/01UCALG_INST/1rf6mu5/alma991020051699704336
- D'Angelo, J., & West, D. (2000). *Mathematical thinking: Problem solving and proofs*, 2nd ed., Prentice Hall.
(Only Appendix A: will be provided through D2L).
https://ucalgary.primo.exlibrisgroup.com/permalink/01UCALG_INST/46139d/alma991017185559704336
https://ucalgary.alma.exlibrisgroup.com/leganto/public/01UCALG_INST/citation/26983932360004336?auth=SAML
- Du Sautoy, M. (2010). A brief history of mathematics. BBC podcast.
<https://www.bbc.co.uk/programmes/b00srz5b/episodes/downloads>
- Burton, D. (2010) *The history of mathematics: An introduction*, 7th ed. McGraw-Hill.
https://ucalgary.primo.exlibrisgroup.com/permalink/01UCALG_INST/1rf6mu5/alma991028153887904336
- Hamilton, G. (2013) *\$1,000,000 unsolved problems for k to 12* <http://mathpickle.com/wp-content/uploads/2016/01/Unsolved-K-12-winners.pdf>
- Lakoff, G. & Núñez, R. (2000). *Where mathematics come from*. New York, NY: Basic Books.
https://ucalgary.primo.exlibrisgroup.com/permalink/01UCALG_INST/46139d/alma991002732969704336
- Martinez, A. A. (2006). Chapter 3. History: Much ado about less than nothing. In A. A. Martinez, *Negative math: How mathematical roles can be positively bent*, (pp. 18-42). Princeton, NJ: Princeton University Press. <https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?docID=5675276&ppg=31>
- Mazur, J. (2014). *Enlightening Symbols: A Short History of Mathematical Notation and Its Hidden Powers*. Princeton, NJ, USA: Princeton University Press. Available online through the library. <https://www.degruyter-com.ezproxy.lib.ucalgary.ca/document/doi/10.1515/9781400850112/html>
- Tao, T. (2006). *Solving mathematical problems: A personal perspective*. Oxford University Press.
https://ucalgary.primo.exlibrisgroup.com/permalink/01UCALG_INST/46139d/alma991012887259704336
- Zames, F. (2008). *Surface area and the cylinder area paradox*. Mathematical Association of America.
<http://www.maa.org/programs/maa-awards/writing-awards/surface-area-and-the-cylinder-area-paradox>
<https://www-jstor-org.ezproxy.lib.ucalgary.ca/stable/3026930>

LEARNING TASKS OVERVIEW

LEARNING TASK	DESCRIPTION OF LEARNING TASK	GROUP / INDIVIDUAL	WEIGHT	DUE DATE
LT1. Concept Study	Complex Numbers: Concept Study Draft: Concept Study Final Report: Concept Study This task aligns with the following learning outcomes:	Group (two members)	10% 5% 10%	Feb. 27 Mar. 13 Apr. 14

LEARNING TASK	DESCRIPTION OF LEARNING TASK	GROUP / INDIVIDUAL	WEIGHT	DUE DATE
	<ul style="list-style-type: none"> communicate mathematical ideas and arguments accurately to diverse audiences (e.g. school students, adults and mathematicians). 			
LT 4. Tests	Test 1 (Complex Numbers) Test 2 (Constructing Number Systems) Test 3 (Functions and Limits) This task aligns with the following learning outcome: <ul style="list-style-type: none"> perform arithmetic and algebraic operations and prove mathematical results related to the content of the course, including complex numbers, constructions of number systems, and functions and limits. 	Individual	18%	Feb. 6 Mar 6 Mar 27

The final grade will be calculated by adding the grades of each task.

WEEKLY COURSE SCHEDULE:

Date	Topic	Readings and Tasks	Due Dates
Week 1 Jan 12-16	Complex numbers	Chapter 1 from Andreescu & Andrica (2014) Tutorial: Complex Numbers	
Week 2 Jan 19-23	Complex numbers	Chapter 1 from Andreescu & Andrica (2014) Tutorial: Complex Numbers	
Week 3 Jan 26-30	Complex numbers	Chapter 2 from Andreescu & Andrica (2014) Chapter 1-3 from Mazur (2004) Tutorial: Complex Numbers	
Week 4 Feb. 2-6	Complex numbers Number: Historical, cultural snapshots of confusion and breakthroughs	Chapter 2 from Andreescu & Andrica (2014) Tutorial: Complex Numbers Chapters 4-7 from Mazur (2004)	Test 1 (LT 4): Feb 6
Week 5 Feb. 9-13	Concept Study	Chapters 8-10 from Mazur (2004) Tutorial: Concept Study drop-in	

Date	Topic	Readings and Tasks	Due Dates
Week 6 Feb. 16-20	Term Break		
Week 7 Feb. 23-27	Concept Study	Chapters 10-12 from Mazur (2004) Tutorial: Concept Study drop-in	Complex Numbers: Concept Study (LT 1) Feb 27
Week 8 Mar. 2-6	Constructing Number Systems	Tutorial: Constructing Number systems Tutorial: Concept Study drop-in	Test 2 (LT 4): Mar 6
Week 9 Mar. 9-13	Mathematical Thinking: Specialization, Generalization and Extension	W: Read chapters 1 to 2 from Mason, et al. (1982/2010). Tutorial: Concept Study drop-in	Draft: Concept Study (LT 1): Mar 13
Week 10 Mar 16-20	Mathematical Thinking: Conjecturing and testing	W: Read chapters 3 to 4 from Mason, et al. (1982/2010). Tutorial: Conjecture & Proof drop-in	Draft: Conjecture & Proof (LT 2): Mar 20
Week 11 Mar 23-27	Functions and Limits	Tutorial: Functions and Limits Tutorial: Concept Study drop-in	Test 3 (LT 4): Mar 27
Week 12 Mar 30 - Apr 3	Mathematical Question Asking	Conjectures & Proofs Presentations (Class & Tutorial)	Presentations: Conjectures & Proofs LT 2
Week 13 Apr 6-10	Mathematical Question Asking	Conjectures & Proofs Presentations (Class & Tutorial)	Presentations: Conjectures & Proofs LT 2
Week 13 Apr 13-14	Wrap-up		Final Report: Concept Study (LT 1): April 14

CHANGES TO SCHEDULE:

Please note that changes to the schedule may occur to meet the emerging needs and dynamics of the participants in the course.

LEARNING TASKS AND ASSESSMENT

The use of generative AI (GAI) is permitted in this course. Students may use GAI tools for idea generation, concept clarification, initial exploration on a project, narrowing scope, outlining, finding initial sources and gathering/formatting references, getting feedback on draft and details, and creating titles or headings.

Students are responsible for all material produced by GAI as if they are the author (e.g., responsible for all matters related to copyright, academic misconduct, etc.). For further insights, the Taylor Institute has created some guiding resources and principles: <https://teaching-learning.ucalgary.ca/resources-educators/generative-ai-teaching-and-learning>

If you have questions about a specific use of other GAI tools, please contact your instructor.

There are four required Learning Tasks for this course.

1. LEARNING TASK 1: Concept Study - DUE:

- **Complex Numbers: Concept Study**, 10% (Fri. Feb. 27th)
- **Draft: Concept Study**, 5% (Fri. March 13th)
- **Final Report: Concept Study**, 10% (Tu. Apr. 14th)

This group-based (two-member) project will focus on the following two themes:

Theme 1. Representations/Instantiations:

How might the concept be represented? What sorts of images are used to introduce and illustrate it? What sorts of metaphors are invoked to explain it? What other concepts are closely related to it? How/when did the concept arise and evolve?

Theme 2. Sifting through Interpretations:

Working with (and possibly extending) your list of representations from the first sub-assignment, critically examine the entries. How do different interpretations channel thinking? How do they enable and constrain thinking? Which seem to afford greater mathematical power? Might some instantiations be blended into more powerful constructs?

In the *Complex Numbers: Concept Study*, groups will address these two themes using the concept of complex numbers.

In the *Concept Study Draft*, groups will choose their own mathematical concept and work to unpack/decompress/deconstruct this concept by focusing on these two themes.

After receiving feedback, groups will work to improve this draft and submit a final *Concept Study*.

CRITERIA FOR ASSESSMENT OF LEARNING TASK 1

The Group Project will be graded based on how students respond to the questions included in the two themes described above (see Representations/Instantiations, Sifting through Interpretations). Questions must be comprehensively and eloquently answered, with proper references to the consulted source. Images should be carefully selected to convey key meanings of the selected mathematical concept. The submission must demonstrate a mastery of mathematical content and include a critical analysis which shows depth. The piece should be succinct and include personal

conclusions which eloquently synthesize the material. The written submissions and presentation should be clear and well-written (or spoken).

A rubric for this assignment will be provided in class.

The draft for feedback will be graded by completion; that is, your team will receive a full mark on this just by submitting a draft that addresses all elements of this task's rubric.

All members in a group will receive the same grade.

2. LEARNING TASK 2: Mathematical Question Asking – DUE:

- **Draft: Conjectures & Proofs**, 5% (Fri. Mar. 12th)
- **Presentation: Conjectures & Proofs**, 20% (Mar. 30th – Apr. 14th in class/tutorial. Dates will be assigned to each group after the groups are chosen.)
- **Respond to two presentations**: 14% (Mar. 30th – Apr. 14th)

This learning task involves engaging in, self-monitoring of, and reporting on a mathematical inquiry. It will begin with a problem posed by the instructor. It will be completed in groups (two members).

Conjectures & Proofs: For this assignment, the problem is not the question, and its solution is not the answer. That is, while your inquiry may involve solving the problem, the more substantial part of the task is to keep the inquiry going by asking new questions. For example, you might ask simpler versions of the problem, inquire into extensions, seek generalizations of aspects of your solution, contrive related problems, or prove insights associated with your solution. And so on.

Draft: Students will receive feedback from the TA on this report.

Presentation: Your presentation will be a hybrid of narrative and mathematical reporting. Narrative elements should address key decision-making moments, provide insight into your thinking processes, identify obstacles and other challenges, speak to strategies used, and so on – in essence, tracking and classifying the sorts of questions you posed as you moved through your inquiry. Where appropriate, it should also highlight key moments of associative thinking, such as uses of images

Mathematical Modelling Report: In this assignment, your “client” will pose a problem, and you will create a model that represents this problem. Your written report will describe your model to your client, specify any assumptions you are making and any limitations to the model, and will offer your recommendation. Results should be communicated in a way that would be easy for the “client” to understand.

Response to two presentations: Individually, you will submit a response to two presentations. Each response should include two parts. The first part consists of a reflection of personal insights regarding the mathematical problem presented. For instance, you can elaborate on your own “Aha” moments or on extensions, generalizations or your further questions regarding the mathematical problem. The second part is a reflection on how the presentation communicated mathematical ideas.

CRITERIA FOR ASSESSMENT OF LEARNING TASK 2

Draft (5%): will be graded based on engagement and not according to mathematical correctness. If you submit a draft that is complete, addresses all aspects of the prompt, and demonstrates a reasonable amount of

effort, then you can expect to receive full marks.

Presentation (20%): will be graded based on the engagement in inquiry on a problem posed by the instructor. Solutions (or partial solutions) to the original question must be presented using different representations. Extensions to these solutions should be discussed, including generalizations of the original problem. Decision-making processes should be well described, including the evolution of questions that furthered the inquiry. The presentation should be engaging, precise, and clear.

Response to two presentations (14%): will be graded based on how the responses address the personal insights and the reflection on the how mathematical ideas were communicated.

A rubric for this assignment will be provided in class.

All members in a group will receive the same grade.

3. LEARNING TASK 3: COURSE ENGAGEMENT: 15% (In-Class Activities/ Tutorial Activities/ Out-of-Class Activities)

The course component will assess content covered in the course readings and in class. They will be assigned by the instructors as the course progresses. Students are expected to attend class and may not receive advanced warning about graded in-class activities. Students will receive advanced notice when a graded activity occurs in the tutorial.

CRITERIA FOR ASSESSMENT OF LEARNING TASK 3

These activities will be graded in terms of engagement (e.g., active participation in class, addressing the prompts, and quality of presentation). Further details about the grading criteria will be provided in class.

4. LEARNING TASK 4: TESTS: 15% – DUE

- **Test 1**, 5% (Feb. 6th)
- **Test 2**, 5% (Mar. 6th)
- **Test 3**, 5% (Mar. 27th)

The course component will assess the content covered in the course.

CRITERIA FOR ASSESSMENT OF LEARNING TASK 4

Each test will be evaluated in terms of appropriate answers. Further details about the grading criteria will be provided in class.

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 concerns 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 assignments. If you find that you are experiencing difficulties as a group collaborating, please inform the instructor.

EXPECTATIONS FOR WRITING

All written assignments (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:

<https://calendar.ucalgary.ca/pages/2c2d1ce47b8c4d008aec9cc3da49876e>

MISSING OR LATE SUBMISSIONS

All late submissions of assignments 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. A late submission may be subject to a 30% penalty.

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 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>

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>

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-cfrieb) 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 assignments that involve conducting research with human participants; in these cases, the instructor will have applied for and received ethics approval for the course assignment. The instructor will discuss the ethical requirements for the assignment with the students.

For further information see E.5 Ethics of Human Studies
<https://calendar.ucalgary.ca/pages/627ed88eb4b041b7a2e8155effac3501>

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.

Access and Privacy Office (Formerly) Freedom Of Information and Protection of Privacy

Student information will be collected in accordance with typical (or usual) classroom practice. Students' assignments 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/legal-services/access-information-privacy>

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

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 Tracy Dinh, esa@ucalgary.ca.

Werklund SU Representative is Siena Yee, educrep@su.ucalgary.ca.