

**EDUC 535.15: Specialization II – Secondary Mathematics
Fall, 2025***Erin Spring*

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).*

Class Dates: Wednesdays - September 3- October 22, 2025

Truth and Reconciliation Day: September 30, 2025

Field Experience II: October 27th – December 12th, 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.

Office Hours: By appointment only

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

COURSE DESCRIPTION:

The intent of the Specialization Seminar II is to deepen students' understanding of the practical aspects of teaching within the specialization and to connect this practice with specific theoretical concepts. While this second specialization course focuses more on practical knowledge, students will also refine their knowledge of discourse and theory within the discipline and develop a deeper understanding of ways to enact this theory in a classroom context. Students will additionally become familiar with any relevant Ministry documents associated with the Alberta Curriculum and draw on practical classroom observation from the field experience to participate in meaningful discussion and to connect these observations with a vision for their own teaching. The emphasis of the course is on designing for student learning (subject-specific; assessment to strengthen student learning and improve instruction; and designing for inclusion, differentiation, and inquiry).

LEARNER OUTCOMES:

Students will:

- 1) Further develop a deeper conceptual understanding of the historical, socio-cultural, political contexts of the discipline, and relate this to curriculum planning in the specialization areas;
- 2) Further develop a deeper conceptual understanding of curricular mathematics, both within a grade (unit of study) and across the grades (horizon conceptual understanding);
- 3) Identify and critique the key learning perspectives (as outlined in the front matter of the Program of Studies) and intentions (learning objectives) across the units in a grade from the Alberta Program of Studies;
- 4) Successfully apply theoretical knowledge to the design of a longer-term unit and assessment plan.

COURSE DESIGN AND DELIVERY: This course will be delivered face-to-face on campus with possible engagement in D2L environment. Extra readings will be posted in D2L and may be assigned by the instructor.

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

REQUIRED RESOURCES:

- Alberta Education (2014). *Program of Study: Mathematics Kindergarten to Grade 9*. Edmonton: Government of Alberta. https://education.alberta.ca/media/3115252/2016_k_to_9_math_pos.pdf
- Alberta Education (2008). *Program of Study: Mathematics Grade 10 to Grade 12*. Edmonton: Government of Alberta. <https://education.alberta.ca/media/564028/math10to12.pdf>
- Alberta Education (2025). *Draft Mathematics 7-9*. Government of Alberta. <https://curriculum.learnalberta.ca/curriculum/en>
- Boaler, J. (2016). Chapter 1: The brain and math learning. *Mathematical Mindsets*, (pp. 1-9). Jossey-Bass. <https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/detail.action?docID=4444210>
- Boaler, J. (2016). Chapter 2: The power of mistakes and struggle. *Mathematical Mindsets*, (pp. 11-20). Jossey-Bass. <https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/detail.action?docID=4444210>
- Boaler, J. (2016). Chapter 5: Rich Mathematical Tasks. *Mathematical Mindsets*, (pp. 57-91). Jossey-bass. <https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/detail.action?docID=4444210>
- Fennell, F., Kobett, B. M., & Wray, J. A. (2017). *The formative 5: Everyday assessment techniques for every math classroom* (pp. 3-16). Thousand Oaks, CA: Corwin. <https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/detail.action?docID=6261733>
- Gilbert, J. M. & Coomes, J. (February 2010). What Mathematics Do High School Teachers Need to Know? *The Mathematics Teacher*, 103(6), 418-423. [UC library] [What Mathematics Do High School Teachers Need to Know? on JSTOR \(ucalgary.ca\)](https://www.jstor.org/stable/41182613)
- Kilpatrick, J., Swafford, J., & Findell, B. (Eds.) (2001). Chapter 4: Mathematical proficiency. *Adding it up: Helping children learn mathematics*, (pp. 115-133). National Academy Press. http://www.nap.edu/catalog.php?record_id=9822
<https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?ppg=136&docID=3375421&tm=1512076004993>
- Kullberg, A., Runesson Kempe, U., & Marton, F. (2017). What is made possible to learn when using the variation theory of learning in teaching mathematics? *ZDM: The International Journal on Mathematics Education*, 49(4), 559-569. [available online through U of C library] <https://link-springer-com.ezproxy.lib.ucalgary.ca/article/10.1007/s11858-017-0858-4>
- Leahy, S., Lyon, C., Thompson, M., & Wiliam, D. (2005). Classroom Assessment: Minute by Minute, Day by Day. *Educational Leadership*, 63(3), 18-24. [available online through U of C library] <https://ezproxy.lib.ucalgary.ca/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=18772694&site=ehost-live>
https://pdo.ascd.org/LMSCourses/PD11OC101M/media/FA_M03_Reading_02_Classroom-Assessment.pdf
- Li, J. (2008). What do students need to learn about division of fractions? *Mathematics Teaching in the Middle School*, 13(9), 546-552. <https://www.jstor.org/stable/41182613>
- Mason, J. (2010). *Effective questioning and responding in the mathematics classroom*.

**2020 edition available in LCR*

<https://www.taylorfrancis-com.ezproxy.lib.ucalgary.ca/chapters/edit/10.4324/9780429021015-11/effective->

[questioning-responding-mathematics-classroom-1-john-mason](#)

Mason, J., Burton, L., & Stacy, K. (2010a). Chapter 1: Everyone can start. *Thinking Mathematically* (2nd Edition, pp. 1-23). Prentice Hall.

<https://www.pearsonhighered.com/assets/samplechapter/m/a/s/o/Mason%20-%20Chapter%201.pdf>

Mc Tighe, J. & Wiggins, G. (2014). *Improve curriculum, assessment, and instruction using the understanding by design framework*. ASCD White Paper. <https://www.jaymctighe.com/wp-content/uploads/2011/04/UbD-White-Paper-June-20141.pdf>

Moore, K. c., & LaForest, K. R. (2014). The Circle Approach to Trigonometry. *The Mathematics Teacher*, 107(8), 617. <https://pubs-nctm-org.ezproxy.lib.ucalgary.ca/view/journals/mt/107/8/article-p616.xml>

National Council of Teachers of Mathematics *Principles to Action: Executive summary*.

https://www.nctm.org/uploadedFiles/Standards_and_Positions/PtAExecutiveSummary.pdf

National Council of Teachers of Mathematics (2014). *Principles to Actions: Ensuring mathematics success for all* (pp. 7-12). Author, Reston, VA. <https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?docID=6478900&ppg=18>

National Council of Teachers of Mathematics (2000). *Principles and Standards for School Mathematics* (pp. 52 – 71). Reston, VA: Author.

https://ucalgary.alma.exlibrisgroup.com/leganto/public/01UCALG_INST/citation/25821679360004336?auth=SAML

Schoenfeld, A. H., & the Teaching for Robust Understanding Project. (2016). *An Introduction to the Teaching for Robust Understanding (TRU) Framework*. Berkeley, CA: Graduate School of Education. Retrieved from <http://map.mathshell.org/trumath.php> or <https://truframework.org/>

Simmt, E., Sookochoff, S., McFeetors, J., Mason, R. T., & Norris, S. P. (2012). Curriculum Development to Promote Visualization and Mathematical Reasoning: Radicals. In *Reading for Evidence and Interpreting Visualizations in Mathematics and Science Education* (pp. 147–163). SensePublishers. <https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/detail.action?docID=3034730>

Skemp, R. (1976). Relational understanding and instrumental understanding. *The Arithmetic Teacher*, 26, 9-15. [Available through U of C library] <http://www.jstor.org.ezproxy.lib.ucalgary.ca/stable/41187667>

Smith, M. S. & Stein, M. K. (February 1998). Selecting and creating mathematical tasks: From research to practice. *Mathematics Teaching in the Middle School*, 3, 344-350. [online through U of C library] <https://www.jstor.org.ezproxy.lib.ucalgary.ca/stable/41180423>

Stockero, S. L., Van Zoest, L. R., Kinzel, M. & Cavey, L. (May, 2011). Making student thinking public. *Mathematics Teacher*, 104, 9, 704-709. [online through U of C library] <http://www.jstor.org.ezproxy.lib.ucalgary.ca/stable/20876997>

Van de Walle, J.A., Karp, K.S., Bay-Williams, J.M., & McGarvey, L.M. (2026). Chapter 6: Teaching mathematics for all learners. *Elementary and middle school mathematics: Teaching Developmentally* (7th Canadian ed.). Pearson Canada. [se D2L]

Van de Walle, J.A., Karp, K.S., Bay-Williams, J.M., & McGarvey, L.M. (2026). Chapter 14: Developing Fraction Concepts. *Elementary and middle school mathematics: Teaching Developmentally* (7th Canadian ed.). Pearson Canada. [see D2L]

Vos, P., & Espedal, B. (2016). Logarithms - a meaningful approach with repeated division. *Mathematics Teaching*, 251, 30. <https://research-ebSCO-com.ezproxy.lib.ucalgary.ca/linkprocessor/plink?id=b9d0594f-bcfe-3e90-b74d-9caee91a7da4>

ADDITIONAL READINGS: Supplemental and/or additional readings will be posted on D2L. These are recommendations for continued professional learning and development. These may also provide supplemental information to support the Learning Tasks.

LEARNING TASKS OVERVIEW

| LEARNING TASK | DESCRIPTION OF LEARNING TASK | GROUP/ INDIVIDUAL | WEIGHT | DUE DATE |
|---------------|---|-------------------|--------|--|
| LT1 | Researching topics on effective mathematics pedagogy for secondary school mathematics and group workshop facilitation Learning Outcomes #2 and 3 | Group | 30% | September 19, 2025 Workshop dates: Sept. 24, Oct. 1, and Oct. 8 |
| LT2 | Designing a unit and assessment plan for AB PoS secondary mathematics concepts Learning Outcomes: #2, 3, and 4 | Individual | 40% | October 17, 2025 |
| LT3 | Reflecting on personal growth in pedagogical mathematics knowledge Learning Outcomes: #1, 2, 3, 4 | Individual | 30% | October 24, 2025 |

Further grading details on Learning Task Assessments are included in the Learning Task Rubrics.

WEEKLY COURSE SCHEDULE:

| Date | Topic | Readings and Tasks | Due Dates |
|--|--|--|---------------|
| Week 1 Class: Sept. 3 th | MKT: Knowledge of content and student; further developing conceptual understandings of math topics | Discuss LT1 Front Matter: Alberta Education (2008) and (2014) (pp. 1-10) Boaler (2016) Chapter 1 and 2 Gilbert & Coomes (2010) Simmet et al. (2012) | |
| Week 2 Class: Sept. 10 th | MKT: Knowledge of content and student Principles for teaching mathematics | Li (2008) Kilpatrick et al. (2001) Mason et al. (2010) Chapter 1 Mason (2010) | |
| Week 3 Class: Sept. 17 st | Mathematical learning tasks Principles for teaching Math | Discuss LT3 – Personal Learning Journey Analyze and evaluate mathematical tasks Boaler (2016) Chapter 5 Smith & Stein (1998) Vos & Espedal (2016) | LT 1: Sept 19 |
| Week 4 Class: Sept. 24 th | Pedagogical mathematics knowledge [PMK] Mathematical thinking and application processes | Workshop DAY 1 on PMK [Sept 28] Van de Walle et al. (2026) Chapter 6 and 14 Discuss class development of rubric for LT2 | LT1 Workshops |

| | | | |
|---|--|--|---------------|
| Week 5 Class: Oct. 1 st | Pedagogical mathematics knowledge [PMK] | Workshop DAY 2 on PMK Kullberg et al. (2017) Schoenfeld & TRU (2016) Skemp (1976) Develop rubric for LT2 with connection to unit planning | LT1 Workshops |
| Week 6 Class: Oct. 8 th | Pedagogical mathematics knowledge [PMK] | Workshop DAY 3 on PMK [Oct 12] Stockero et al. (2011) Schoenfeld (2016) Moore & LaForest (2014) | LT1 Workshops |
| Week 7 Class: Oct. 15 th | Unit plan | Examine components of unit plan design Learning objectives Alberta Education (2008) and (2014) Inquiry teaching/learning McTighe & Wiggins (2014) Fennell et al. (2017) Assessing for understanding Leahy et al. (2005); Fennell et al. (2017) | LT2: Oct. 17 |
| Week 8 Class: Oct. 22 nd | Grading Provincial Mathematics Exams | Examine approaches to grading Explore evaluation of diploma exam questions | LT3: Oct. 24 |

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
Generative AI :

- Students must not copy or paraphrase from AI applications for assignments
- AI tools will be prohibited for all three learning tasks but allowed for information gathering.
- All other considerations for AI use must be cleared with the instructor.

There are three required Learning Tasks for this course.

Following are general description of the 3 required Learning Tasks for this course.

Specific guidelines for each will be discussed in class and posted on D2L when necessary.

1. LEARNING TASK 1: Researching effective mathematics pedagogy (Group – 30%)

You will work in groups of 2-3 to select and research a mathematics concept and pedagogy topic to further develop your knowledge of effective planning and teaching of secondary school mathematics. Each group will select a different mathematics topic from a list of topics (on D2L) and address contemporary ideas and practices to teach the mathematics meaningfully and with deep understanding. The research process will consist of exploring resources that include relevant course readings, journals for mathematics teachers, and online publications on teaching and learning secondary school mathematics.

The research report could include text, math examples, visuals, media, and other supporting links for this inquiry and must include:

- i. The topic selected and rationale, the key ideas and practices found, connections or uses in the secondary mathematics classroom, questions or concerns that still remain, and references of all resources used in APA7 format.
- ii. A 30-minute instruction plan (professional development workshop) for teaching the topic to the rest of the class in an engaging way. It should be a thoughtful plan of how you will engage the members of your class to learn the topic based on your insights and learning; what you want them to know/learn about topic. Starting on Sept. 21 – 3 groups will lead our *Mathematics Pedagogy Workshop* followed by 3 additional groups Sept. 28th and Oct. 5th.

CRITERIA FOR ASSESSMENT OF LEARNING TASK 1: RUBRIC ON D2L

The research report will be assessed on the following criteria:

- Quality of report, based on:
 - informative design and design elements of report
 - sufficiency of information provided
 - significance and relevance of resources
 - clarity of discussion/information
 - coherent explanation to reflect collaboration and not isolated pieces of information
 - correct use of APA7
- Quality of learning, based on:
 - depth of understanding of ideas and practices and influence on your pedagogical practices based on substantive evidence
 - Well-developed depth of understanding of the topic shown through credible and respected referenced connections between theory and practice
 - Depth of insight, based on the quality, defensibility, and incisiveness of ideas and practices
 - Appropriateness and meaningfulness of ideas and practices for secondary school mathematics
 - Depth of engagement with resources based on level of substantive, high-quality evidence included
- Quality of instructional plan, based on:
 - Constructive and thoughtful activities to engage the class
 - Effectiveness of plan to engage class in learning key findings
 - Clarity and sufficiency of information provided

2. LEARNING TASK 2: Designing a Unit & Assessment Plan (40%)

For this assignment, you will work individually to design a unit-plan for supporting secondary school mathematics students' development and assessment of deep/conceptual understanding of a key mathematics concept from the Alberta mathematics program of study (G7-12). Further details and guidelines for designing the unit plan will be discussed in class.

1. Design a unit-plan for learning and assessment plan to sponsor deep understanding of a key disciplinary concept and/or competency;
2. Include a rationale for the learning plan, as supported by theory and discipline; and
3. Discussion of practicalities of enacting this learning and assessment plan: fitting it into a larger context/concept, integration of effective formative assessment strategies for scaffolding and adapting to the needs of diverse learners.

CRITERIA FOR ASSESSMENT OF LEARNING TASK 2

In collaboration with your peers and instructor, you will develop the assessment criteria and performance levels based on five key themes:

| | A+ / A | A- / B+ | B / B- | Still Developing |
|--|--------|---------|--------|------------------|
| Build and deepen understanding Help develop strong learning tasks that focus students on issues, questions and problems central to the discipline. | | | | |
| Informed by disciplinary knowledge/Programs of Study Makings meaningful connections to ways of thinking about the discipline, and in alignment with the Programs of Study in your disciplinary area. | | | | |
| Authentic and engaged learning Learning is meaningful and relevant to students and to the broader community, and that are of real concern and central to the discipline. | | | | |
| Balanced assessment Assessment of learning provides a comprehensive and holistic picture of student learning and competencies. | | | | |
| Differentiated learning Addresses the diversity and range of students' needs (must include three ways in which your plan addresses the diverse needs of students, one of which must include ELL strategies or integration). | | | | |

1. Design a unit-plan for learning and assessment plan to sponsor deep understanding of a key disciplinary concept and/or competency;
2. Include a rationale for the learning plan, as supported by theory and discipline; and
3. Discussion of practicalities of enacting this learning and assessment plan: fitting it into a larger context/concept, integration of effective formative assessment strategies for scaffolding and adapting to the needs of diverse learners.

3. LEARNING TASK 3: Reflecting on growth in pedagogical mathematics knowledge (30%): Rubric on D2L

The purpose of this learning task is for you to reflect on, and/or demonstrate growth in your pedagogical mathematics knowledge that has been valued as informative for your future practice. Through in-class and out-of-class work to further develop your pedagogical mathematics knowledge by deeply exploring a secondary mathematics topic for connections, history, disciplinary terminology, multiple representations, applications, and pedagogical approaches, you will present a journey and/or document of your new mathematical understandings. Details of the content for this assignment will be discussed in class.

CRITERIA FOR ASSESSMENT OF LEARNING TASK 3

The work will be assessed on the following criteria:

- Clear organization and explanation with appropriate length.
- Writing indicative of original thinking and a willingness to reflect deeply.
- Insightful, thoughtful, meaningful explanation of what you learned about the topic of mathematics pedagogy and anything you still want to know to enhance your pedagogical knowledge of the topic.
- Thoughtful, meaningful questions related to mathematics pedagogy.
- Photos/images of personal mathematics work from exploring a topic in-depth and pedagogical approaches found and justified (referencing peer reviewed literature and/or course readings) for your new mathematical understandings and insights for teaching mathematics.
- Correct citations and reference list in APA 7 format.
- Relevant evidence from class workshops, required course readings, and peer reviewed articles to support claims.

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 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. Instructors can add penalties for late assignments here. <https://calendar.ucalgary.ca/pages/jyekfh6xwhoHwxcetCi1>

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-cfreh>) or the Conjoint Health Research Ethics Board (<https://research.ucalgary.ca/conduct-research/ethics-compliance/human-research-ethics/conjoint-health-research-ethics-board-chreh>)

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.

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

The Freedom of Information Protection of Privacy Act prevents instructors from placing assignments or examinations in a public place for pickup and prevents students from access to exams or assignments other than their own. Therefore, students and instructors may use one of the following options: return/collect assignments during class time or during instructors' office hours, students provide instructors with a self-addressed stamped envelope or submit/return assignments 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 Tracy Dinh, esa@ucalgary.ca.

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