EDUC 460.22: Specialization I K-12 Mathematics
Summer, 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: Monday through Friday, July 7, 2025 -July 18, 2025
Office Hours: By appointment only

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.

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 specialization of Mathematics from Kindergarten to Grade 12. 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 design and lesson planning.

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 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.

COURSE DESIGN AND DELIVERY: This course will be delivered face-to-face on campus. Participation is crucial to the knowledge building in this course. Students will require access to a computing device that contains current software and hardware capable of running D2L and creating documents for learning tasks. If you do not own a personal device, there are computer available for student use in the Doucette library and the Taylor Family Digital Library.

REQUIRED RESOURCES:

Required Text: Available at the bookstore: ISBN 9780138304829

Van de Walle, J.A., Karp, K.S., Bay-Williams, J.M., & McGarvey, L.M. (2026). *Elementary and middle school mathematics: Teaching Developmentally (7th Canadian ed.).* Pearson.

Required Readings available online and in Leganto [D2L]

Alberta Education (2022). *Mathematics Kindergarten to Grade 6 Curriculum.* Learn Alberta: Government of Alberta. https://curriculum.learnalberta.ca/printable-curriculum/en/home

Alberta Education (2016). *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 10-12.* Edmonton: Government of Alberta. https://education.alberta.ca/media/564028/math10to12.pdf

Boaler, J. (2016). *Mathematical Mindsets* [Chapter 3, pp. 21-32]. San Francisco, CA: Jossey-Bass. [in Leganto on D2L]
https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/detail.action?docID=4444210

Gilbert, J. M. & Coomes, J. (February 2010). What Matheamtics 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)

Jaworski, B. (2015). Teaching for mathematical thinking: Inquiry in mathematics learning and teaching. *Mathematics Teaching, 248,* 28-34.
https://www.atm.org.uk/write/MediaUploads/Journals/MT248/MT248-15-11.pdf
Also available in LCR:
https://ezproxy.lib.ucalgary.ca/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=110191133&site=ehost-live

Kilpatrick, J., Swafford, J., & Bradford, F. (2001a). The stands of mathematical proficiency. In *Adding it up: Helping children learn mathematics* (pp. 115-155). National Academy Press.
https://www.nap.edu/catalog/9822/adding-it-up-helping-children-learn-mathematics

Ontario. (2014). *Paying attention to spatial reasoning*. Government of Ontario.
https://www.onted.ca/monographs/print-series/paying-attention-to

SanGiovanni, J., Katt, S., & Dykema, K. J. (2020). Chapter 1: Value Productive Struggle (pp. 8-28). *Productive math struggle : a 6-point action plan for fostering perseverance*. Corwin.
https://ezproxy.lib.ucalgary.ca/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=2524744&site=ehost-live *(*E-book licence permits only one online user at a time; please download chapter ahead of schedule to avoid access issues)*

SanGiovanni, J., Katt, S., & Dykema, K. J. (2020). Chapter 5: Support the Productive Struggle During the Lesson (pp. 111-146). *Productive math struggle : a 6-point action plan for fostering perseverance*. Corwin.

https://ezproxy.lib.ucalgary.ca/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=2524744&site=ehost-live *(*E-book licence permits only one online user at a time; please download chapter ahead of schedule to avoid access issues)*

Wathall, J. T.H. (2016). Chapter 1 – Why is it important for my students to learn conceptually? (pp. 2-24). *Concept-Based Mathematics: Teaching for Deep Understanding in Secondary Classrooms.* Corwin Mathematics. https://sk-sagepub-com.ezproxy.lib.ucalgary.ca/books/concept-based-mathematics/i478.xml

Wathall, J. T. H. (2016). Chapter 2- What are the levels of the structures of knowledge and process for mathematics? (pp. 25-60). *Concept-Based Mathematics: Teaching for Deep Understanding in Secondary Classrooms.* Corwin Mathematics. https://sk-sagepub-com.ezproxy.lib.ucalgary.ca/book/mono/concept-based-mathematics/chpt/what-are-levels-the-structures-knowledge-process

SanGiovanni, J., Katt, S., & Dykema, K. J. (2020). Chapter 1: Value Productive Struggle (pp. 8-28). *Productive math struggle : a 6-point action plan for fostering perseverance*. Corwin. https://ezproxy.lib.ucalgary.ca/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=2524744&site=ehost-live *(*E-book licence permits only one online user at a time; please download chapter ahead of schedule to avoid access issues)*

SanGiovanni, J., Katt, S., & Dykema, K. J. (2020). Chapter 5: Support the Productive Struggle During the Lesson (pp. 111-146). *Productive math struggle : a 6-point action plan for fostering perseverance*. Corwin. https://ezproxy.lib.ucalgary.ca/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=2524744&site=ehost-live *(*E-book licence permits only one online user at a time; please download chapter ahead of schedule to avoid access issues)*

ADDITIONAL RESOURCES:

Aikenhead, G. (2017). Educational contexts. In *School mathematics for reconciliation: From a 19th to a 21st century curriculum* (pp. 14-26). Aboriginal Education Research Center. https://education.usask.ca/documents/profiles/aikenhead/School-Mathematics-for-Reconciliation-vB11.pdf

Alberta Education (2008). Assessment in mathematics. Available online at: http://www.learnalberta.ca/content/mewa/html/assessment/index.html

Alberta Education (2010). *Making a difference: Meeting diverse learning needs with differentiated instruction.* https://open.alberta.ca/publications/9780778586012

Liljedahl, P. (2021). How we use formative assessment in a thinking classroom. In *Building thinking classrooms in mathematics, Grades K-12 : 14 teaching practices for enhancing learning* (pp. 230-251). Corwin. https://ezproxy.lib.ucalgary.ca/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=2637712&site=ehost-live&ebv=EB&ppid=pp_230

E-book licence permits only one online user at a time; per day, a user may print to PDF up to 100 pages

Liljedahl, P. (2021). How we use hints and extensions in a thinking classroom. In *Building thinking classrooms in mathematics, Grades K-12 : 14 teaching practices for enhancing learning* (pp. 144-169). Corwin https://ezproxy.lib.ucalgary.ca/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=2637712&site=ehost-live&ebv=EB&ppid=pp_144

E-book licence permits only one online user at a time; per day, a user may print to PDF up to 100 pages

Mathigon. (2020). *Polypad*. UCL Institute of Education in London. https://mathigon.org/polypad [virtual math manipulatives]

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

Piggott, J. (2014). *Rich tasks and contexts.* http://nrich.maths.org/5662

Posamentier, A. (2003). *Math Wonders to Inspire Teachers and Students.* ASCD. https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/detail.action?docID=3002073

Small, M. (2013). *Eyes on Math: A Visual Approach to Teaching Math Concepts.* Nelson.

Small, M. (2014). *Uncomplicating Fractions to Meet Common Core Standards in Math, K-7*. Teachers College Press. [Doucette Library]

Alberta Regional Professional Development Consortium (2024). *Curriculum Resources: Mathematics.* Retrieved from https://arpdc.ab.ca/focuses/math/?site_language=english

LEARNING TASKS OVERVIEW

LEARNING TASK	DESCRIPTION OF LEARNING TASK	GROUPING	WEIGHT	DUE DATE
1	Design and Facilitate Class experience of a Rich Math Task [Learning outcomes #1, 2, 3]	Individual	30%	July 11th
2	Engaging the Collective: Problem-based learning and Leading Math Discourse [Learning outcomes #1, 2, 3]	Individual	30%	July 14th and 15th
3	Creation of Short-term Learning and Assessment Plan [Learning outcomes #1-4]	Individual	40%	July 18th

WEEKLY COURSE SCHEDULE:

Date	Topics	Readings	Due Dates
Day 1 July 7	Introduction: Mathematics Teaching and Learning Essential Question: *What is mathematics, and why does it matter?*	Van de Walle, J.A., Karp, K.S., Bay-Williams, J.M., & McGarvey, L.M. (2026). Chapter 1 and 2: *Elementary and middle school mathematics: Teaching Developmentally (7th Canadian ed.).* Pearson Canada. Boaler, J. (2016). *Mathematical Mindsets* [Chapter 3, pp. 21-32].	
Day 2 July 8	Mathematical Proficiency and Curriculum Introduction Essential Question: *What does it mean to learn mathematics? What is the role of the mathematics teacher?*	Van de Walle, J.A., Karp, K.S., Bay-Williams, J.M., & McGarvey, L.M. (2026). Chapter 2 and 3 Wathall, J. T.H. (2016). Chapter 1 Alberta Education (2022, 2016, 2008) Curriculum	
Day 3 July 9	Mathematical Inquiry, Rich Math Tasks, and Mathematical Discourse	Van de Walle, J.A., Karp, K.S., Bay-Williams, J.M., & McGarvey, L.M. (2026). Chapter 3 and 4 SanGiovanni, J., Katt, S., & Dykema, K. J. (2020). Chapter 1: Value Productive Struggle	

	Essential Question: *How to engage all mathematical learners?*	Additional: Jaworski, B. (2015). Teaching for mathematical thinking: Inquiry in mathematics learning and teaching.	
Day 4 July 10	Mathematical Thinking and Spatial Reasoning Essential Question: *How to engage students in mathematical thinking?*	Ontario. (2014). *Paying attention to spatial reasoning*. Government of Ontario. https://www.onted.ca/monographs/print-series/paying-attention-to Optional: Kilpatrick, J., Swafford, J., & Bradford, F. (2001b). Teaching for mathematical proficiency. In *Adding it up: Helping children learn mathematics* (pp. 313-368).	LT1 – check in and early submissions
Day 5 July 11	Mathematics Knowledge for Teaching: Algebraic Thinking Essential Question: *What is algebraic thinking? What does this look like throughout the grades?*	Van de Walle, J.A., Karp, K.S., Bay-Williams, J.M., & McGarvey, L.M. (2026). Chapter 14:	LT1 due
Day 6 July 14	Lesson Design Essential Question: *How can key components of Understanding by Design be applied to create learning and assessment plans?*	Van de Walle, J.A., Karp, K.S., Bay-Williams, J.M., & McGarvey, L.M. (2026). Chapter 4 and 5 Additional: 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	LT2 – Class enactments of discourse and problem solving
Day 7 July 15	Mathematics Knowledge for Teaching: Specialized content knowledge and connections Essential Question: *How are mathematical concepts connected?*	Van de Walle, J.A., Karp, K.S., Bay-Williams, J.M., & McGarvey, L.M. (2026). Chapter 12 and 14 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)	LT2 – Class enactments of problem solving and mathematical discourse.
Day 8 July 16	Mathematics Knowledge for Teaching	Van de Walle, J.A., Karp, K.S., Bay-Williams, J.M., & McGarvey, L.M. (2026). Chapter 3 (Math Discourse and Purposeful Questioning)	

	Essential Question: *Does the 'how' and 'why' the mathematics content works enough of hook for student learning? How to elicit student thinking?*	Additional reading will be provided for Questioning techniques. Optional: Liljedahl, P. (2021). How we use hints and extensions in a thinking classroom. In *Building thinking classrooms in mathematics, Grades K-12 : 14 teaching practices for enhancing learning* (pp. 144-169). Corwin https://ezproxy.lib.ucalgary.ca/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=2637712&site=ehost-live&ebv=EB&ppid=pp_144 ***E-book licence permits only one online user at a time; per day, a user may print to PDF up to 100 pages***	
Day 9 July 17	Mathematics Knowledge for Teaching Essential Question: *How to structure the lesson plan?*	Wathall, J. T. H. (2016). Chapter 2 SanGiovanni, J., Katt, S., & Dykema, K. J. (2020). Chapter 5: Support the Productive Struggle During the Lesson (pp. 111-146).	
Day 10 July18	Culturally Relevant Pedagogy, Indigenous Ways of Knowing Essential Question: *Is mathematics a universal language?*	Van de Walle, J.A., Karp, K.S., Bay-Williams, J.M., & McGarvey, L.M. (2026). Chapter 6 – Teaching Mathematics Equitably Aikenhead, G. (2017). Educational contexts. In *School mathematics for reconciliation: From a 19th to a 21st century curriculum* (pp. 14-26). Aboriginal Education Research Center. https://education.usask.ca/documents/profiles/aikenhead/School-Mathematics-for-Reconciliation-vB11.pdf	LT 3 Due

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

*Please note that all assignments are expected to be the original work of the student and students are not to employ text generation software (for example, ChatGPT or AI) for completion of learning tasks. For responsible use of these technologies within a learning environment, see link: https://taylorinstitute.ucalgary.ca/first-response-assessment-and-chatgpt

There are 3 required Learning Tasks for this course.

1. LEARNING TASK 1: *Design and Facilitate Class Experience of a Rich Math Task*

For this assignment, you will design a rich math task and enact teaching/facilitating the class in learning through this math task. This is an opportunity to further develop your conceptual/spatial understanding of a particular mathematics concept. Practice teaching/facilitating classmates learning allows a safe space for personal experience and reflection on practice, along with constructive feedback.
The purpose will be to: foster professional learning conversations and build understandings of the teachers' knowledge used for the work of teaching (specialized content knowledge of mathematics).

CRITERIA FOR ASSESSMENT OF LEARNING TASK 1

Criteria	A Meets all and exceeds some requirements	B+ to A- Meets all requirements	B- to B Meets most requirements	Does not meet requirements
Math Task Design: (30%)	Student clearly articulates and understands how this math task addresses mathematical problem solving, mathematical processes, high cognitive demand, and multiple entry points.	Student communicates how this math task addresses mathematical problem solving, mathematical processes, high cognitive demand, and how potential students will engage in the task.	Student is able to communicate some of the components of the math task meets criteria regarding. Student is somewhat aware of how potential students will engage in the task.	Student is still developing an understanding of a what components make a math task into an effective learning activity.
Conceptual understanding of the Mathematics and **relevance** to the **Alberta Curriculum (30%)**	Student can confidently describe the multiple representations, problem solving approaches, and connections of the mathematics within the task. Student clearly understands how this math task addresses the specific mathematical understandings relevant to particular learning outcomes from Alberta Education.	Student can demonstrate some conceptual understanding of the mathematics in the task, and some aspects of problem solving and mathematical processes that are within the task. Student understands what Alberta curriculum the task may address for student learning and is still developing an understanding for the details of how the task achieves this connection.	Student is still developing a relational understanding of the mathematics. Instrumental understanding (procedure base) remains the dominant understanding. Student can find connections with the math and the Alberta curriculum. Student is still developing an understanding as to how the task may address the curriculum outcomes.	Student is still developing an understanding of the mathematics content, problem solving approach, and mathematical processes. Student is still developing an understanding of what the Alberta curriculum learning outcomes are requiring the mathematics student to learn.
Organization (10%)	The student is well organized with planning and preparing materials for classmates to engage in the math task.	The student is somewhat organized and prepared with materials required for classmates to engage in the math task.	The student is not organized and does not have materials prepared for classmates to engage in the math task.	The student is still developing organization and preparation skills.

Reflection on personal learning (30%) (Choice of Medium)	- Oral/written communication is clear, robust, and demonstrates deep understanding about this reflective learning process. Class feedback is considered and future considerations for further learning and practice are well explained. -Writing style is academic. In-text citations and reference list use correct APA 7th edition style. Paper demonstrates superior attention to form.	- Oral/written communication is clear and the student demonstrates adequate understanding about this reflective learning process. Class feedback is somewhat considered. Future considerations for personal learning are considered. -Writing style is primarily academic. Most in-text citations and reference list use correct APA 7th edition style. Paper demonstrates attention to form.	- Oral communication is sometimes unclear and lacks clarity about this reflective learning process. Class feedback is not considered or is mentioned in a cursory manner. Future learning is not considered. -Writing style is somewhat academic, sometimes informal. Some in-text citations and reference list use correct APA 7th edition style. Paper requires some attention to form.	- Paper requires extensive attention to form. -Oral communication is unclear, not reflective of this learning process. -Writing style is informal. In-text citations and reference list are missing or not in APA style.

2. **LEARNING TASK 2:** ***Engaging the Collective: Problem-based learning and Leading Math Discourse***

For this learning task, you will engage in developing a problem-based approach to explore a mathematics concept. Questions will be planned for preparation purposes; then enacted with classmates for the experience of 'thinking-in-the-moment' to engage learners in mathematical thinking and/or elicit others' mathematical thinking (making mathematical processes transparent for the teacher and the learner). Along with this in-class practice experience, student will hand in their own personal work of exploring the mathematics concept in detail; the design process/ research into developing a problem-based approach to engage student thinking, and a reflection of personal learning gained from this work. As a learning exercise, the rubric for this task will be designed during class with the instructor.

3. LEARNING TASK 3: Creation of Short-term Learning and Assessment Plan

Lesson plans are central to imagine and facilitate meaningful classroom experiences to support students' learning and doing of mathematics, development of mathematical problem solving skills, procedural fluency, and conceptual understanding of mathematics content. This assignment allows you to learn how to create such lesson plans by applying your understanding of inquiry/problem-based teaching/learning and MKT for a mathematics concept (from your choice of learning outcomes Kindergarten to Grade 12).

Working individually, you will select a mathematics concept from the Alberta Mathematics Program of Studies (K-12) and design a lesson plan for an 80-minute class. Your plan should follow a clear and comprehensive template and include a plan for learning and assessment that promotes mathematical thinking and deep understanding of the concept. In addition to the lesson plan, you will provide narrative explanations of your thinking and decision-making processes relevant to developing the lesson plan based on the guidelines discussed in class. You should justify the pedagogical choices you make with reference to the course readings, class discussions, and other sources.

CRITERIA FOR ASSESSMENT OF LEARNING TASK 3

Criteria	A Meets all and exceeds some requirements	B+ to A- Meets all requirements	B- to B Meets most requirements	Does not meet requirements
DESIGN Curricular Outcomes (10%) -links to Program of Study (PoS)	Appropriate links to PoS for chosen level; clear understanding of curricular outcomes as expressed in POS	Some links to PoS for chosen level are clear and appropriate; some PoS curricular outcomes are represented in lesson plan	Links to PoS for chosen level not clear or appropriate; curricular outcomes present but not clearly articulated	Few if any links provided between PoS and lesson elements; curricular outcomes not present
INSTRUCTIONAL DELIVERY -plan demonstrates disciplinary knowledge, engagement, student-centeredness, organization, integration across lesson sections (20%)	Lesson Plan is well informed by disciplinary knowledge; lesson highly engaging; lesson is clearly student-centered; lesson clear and well-ordered; easy to envision how lesson will unfold; all important elements included; high degree of integration sections and excellent links	Good evidence of carryover of disciplinary knowledge to lesson plan; lesson is some-what engaging mostly student-centered; good attempt to integrate parts of the lesson; lesson plan mostly clear and logical flow; most important elements included	Some evidence that disciplinary knowledge informed creation of lesson plan; lesson is somewhat student-centered but needs to be strengthened; lesson plan flow is neither clear nor logical and is hard to follow; several important elements of good lesson plan are missing	Little evidence that disciplinary knowledge informed creation of plan; lesson is teacher-centered; lesson plan is missing important elements and does not flow well (hard for reader to imagine how the lesson would unfold)
DEEP UNDERSTANDING -learning opportunities for deep understanding of curriculum objectives (20%)	Lesson design is highly effective for supporting deep/ conceptual understanding of content objectives by students	Lesson design provides good opportunities to encourage deep/ conceptual understanding by students	Lesson design shows awareness of importance of encouraging deep understanding by students but not effective in achieving that understanding	Absence of evidence of attempt to encourage deep understanding by students
Assessment -integrated formative assessments -statement of how assessment will improve practice (15%)	Appropriate assessments are clearly integrated into lesson; clearly communicates to students how individual tasks fit in. Uses a variety of effective formative assessments to inform instructional decisions and to improve practice; strong statement of how assessment will improve practice	Good effort to integrate appropriate and effective assessments; Shows some variety in choices for formative assessment – most are effective; clear statement of how assessments will improve practice	Some attempt to include appropriate assessment opportunities; shows lack of understanding of what constitutes effective assessment; no communication to students of how to situate their work. Formative assessment options are limited and not effective; does not address how assessment will lead to improved practice	Assessment lacking; no understanding shown of importance of appropriate and effective assessment; clear lack of direction for students. Unclear vision of how to include assessment; discussion of importance of assessment or how it can be used to improve practice needs to be strengthened/ revised

NARRATIVES -depth of analysis/understanding (15%)	Narratives display a sophisticated, elegant, clear understanding of the nature of most/all of the guideline items in lesson planning and design.	Narratives display a competent understanding of the nature of many of the guideline items in lesson planning and design.	Narratives display some understanding of the nature of some of the guideline items in lesson planning and design.	Narratives display little understanding of the nature of most of the guideline items in in lesson planning and design.
WRITING QUALITY (10%)	The lesson plan and narratives are clearly written and stand as a superior example free of errors.	The lesson plan and narratives are relatively clearly written and contains few errors.	The lesson plan and narratives are somewhat unclearly written and contains errors that impede understanding.	The lesson plan and narratives are unclearly written and contains many errors that impede understanding.
REFERENCES (10%)	Clearly stated; Accurately APA7 referenced	Stated; APA 7 referenced with minor errors	Unclear; referenced but not to APA 7 guidelines	Not stated or unclear; not referenced.

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: http://www.ucalgary.ca/pubs/calendar/current/e-2.html

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.

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

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-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 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/627ed88eb4b041b7a2e8155effac350

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/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 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, educrep@su.ucalgary.ca.

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