

## EDUC 205: Reading Educational Research Fall 2025

Erin Spring

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 Battle River Territory (Districts 5 and 6).

Class Dates: September 2 – December 5, 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**: Admission to Bridging to Community-Based BEd stream. 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.

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

### COURSE DESCRIPTION:

Focusing on students' reading skills, this course continues to develop awareness of academic language genres, formal versus informal language use, and the development of critical thinking and logical argumentation skills. Continuing development of study skills and approaches that foster long-term academic success are integrated into course materials.

**LEARNER OUTCOMES:** Learners who successfully complete this course will demonstrate that they are able to:

#	Learning Outcome (LO)	Learning Domain	LO assessed by: Learning Task (LT)
L01	Identify, organize, describe and present the roles played by academic texts in learners' educational and professional communities.	Cognitive	LT1: Learning journal LT2: Research presentation LT3: Research comparator
L02	Examine, discuss, interpret, and reflect upon a variety of academic texts, both written and visual.	Affective	LT1: Learning journal LT2: Research presentation LT3: Research comparator
L03	Perform, demonstrate, operate, and initiate interaction with digital technology tools for	Psychomotor	LT1: Learning journal LT2: Research presentation



## WERKLUND SCHOOL OF EDUCATION UNDERGRADUATE PROGRAMS IN EDUCATION

academic learning.	LT3: Research comparator
--------------------	--------------------------

COURSE DESIGN AND DELIVERY: This course will be delivered asynchronously, online through engagement in a D2L environment, and synchronously through Zoom. To successfully fulfill the Learning Outcomes (LOs) and to complete all elements of the Learning Tasks (LTs) for this course, students will need reliable internet access; an internet-connected device able to access, install and run the University of Calgary's suite of software; and a computer microphone and camera for video recording.

#### **COURSE PEDAGOGY RATIONALE:**

In the view of this instructor, digital literacy is an essential skill in an increasingly digitized world, and as such, both supplements and challenges traditional understandings of literacy. Computational thinking (CT) forms a central part of digital literacy<sup>ii</sup>, provides a critical skill set for learning and teaching in this present era, and even a lens for looking at the world; as such, the argument can be made for CT to be embedded – in accessible forms – across the K-12 curriculum. iii CT therefore informs and underlies the pedagogical approaches to this course.

Also in the view of this instructor, the wide availability of generative artificial intelligence (GAI) tools for producing high-quality texts of all types requires a seismic rethink of traditional pedagogies for teaching, learning, assessment and research at all levels of education. The instructor's own bias is that of a techno-optimist (Andreesen, 2023)<sup>iv</sup>, so the assumption of this course is that GAI means of accessing and producing texts should be embraced: understood as *enhancements* to deeper learning, rather than barriers requiring bans by instructors or hidden use by students.

### REQUIRED RESOURCES:

American Psychological Association. (2019). APA Publication Manual (Seventh Edition). Washington, APA.

### LEARNING TASKS OVERVIEW

LEARNING TASK	DESCRIPTION OF LEARNING TASK	GROUP/	WEIGHT	DUE DATE
		Individual		
Learning journal	Reflective video blogs on research readings	Individual	30%	Weekly
Research presentation	Asynchronous video presentation of readings	Individual	30%	07.11.2025
Research comparator	Computational thinking in research readings	Individual	40%	30.11.2025

There are three  $(\underline{3})$  required Learning Tasks (LTs) for this course. Students must complete and pass **all** three  $(\underline{3})$  required LTs in order to pass the course. Assessment rubrics for the LTs, aligned to each Learning Outcome and Learning Domain, as well as detailed instructions for successful completion, are provided in D2L.

#### **WEEKLY COURSE SCHEDULE:**



The weekly course schedule is posted, with regular updates, to D2L. Because changes to schedule may occur in response to the emerging needs of learners, students should refer to D2L in the first instance for updated course schedule information.

## **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

LEARNING TASK	DESCRIPTION	GROUP / INDIVIDUAL	WEIGHT	DUE
LT01 Learning journals*	<ul> <li>Learners will:</li> <li>prepare, present and post video blog journals to the course learning management platform (D2L), which reflect on self-learning gained in interactions with a reading tutor chatbot as they explore academic texts in the field of education.</li> <li>reflectively review, respond, and reply to classmates' video blogs.</li> </ul>	Individual	grading rubric posted to D2L	Weekly: Sundays 23:59 MDT
LT02 Asynchronous video presentation of readings*	Learners will:  • prepare, present, and post to D2L a recorded multimedia presentation of a student-selected reading list on an educational research topic, explaining the literature search process; justifying selection criteria; comparing and contrasting content; and reflecting upon learnings.	Individual	grading rubric posted to D2L	Friday, Nov 07 23:59 MDT
LT03 Research comparator*	Learners will:  • prepare, present and post to D2L a recorded multimedia presentation demonstrating computational thinking through collecting data; creating data; manipulating data; analyzing data; and visualizing data.	Individual	grading rubric posted to D2L	Sunday, Nov 30 23:59 MDT

<sup>\*</sup>Rubrics for each LT, aligned to each LO and Learning Domain, are provided in D2L, along with detail instructions for successful completion.



### 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: <a href="https://calendar.ucalgary.ca/pages/2c2d1ce47b8c4d008aec9cc3da49876e">https://calendar.ucalgary.ca/pages/2c2d1ce47b8c4d008aec9cc3da49876e</a>

### 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. Please view the <u>Supporting Documentation for</u> Absences section of the Academic Calendar.

## 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:** (see F.1 Grading System & Transcripts - UC calendar)

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	
В	3.0	75-79	Good - clearly above average performance with knowledge
			of subject matter generally complete
В-	2.7	70-74	
C+	2.3	65-69	
С	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: <a href="https://ucalgary.ca/student-services/student-success/learning/academic-integrity">https://ucalgary.ca/student-services/student-success/learning/academic-integrity</a>

#### **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: <a href="https://ucalgary.ca/student-services/access/prospective-students/academic-accommodations">https://ucalgary.ca/student-services/access/prospective-students/academic-accommodations</a>.

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: <a href="https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Accommodation-for-Students-with-Disabilities-Procedure.pdf">https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Accommodation-for-Students-with-Disabilities-Procedure.pdf</a>

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 <a href="https://calendar.ucalgary.ca/pages/a89ecfbf758841b5983c4b67746e7846">https://calendar.ucalgary.ca/pages/a89ecfbf758841b5983c4b67746e7846</a>

### **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 <a href="https://calendar.ucalgary.ca/pages/627ed88eb4b041b7a2e8155effac3501">https://calendar.ucalgary.ca/pages/627ed88eb4b041b7a2e8155effac3501</a>

#### **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**



## WERKLUND SCHOOL OF EDUCATION UNDERGRADUATE PROGRAMS IN EDUCATION

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 <a href="https://www.ucalgary.ca/legal-services/university-policies-procedures/student-non-academic-misconduct-policy">https://www.ucalgary.ca/legal-services/university-policies-procedures/student-non-academic-misconduct-policy</a>.

## **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 <a href="https://www.ucalgary.ca/legal-services/university-policies-procedures/sexual-and-gender-based-violence-policy">https://www.ucalgary.ca/legal-services/university-policies-procedures/sexual-and-gender-based-violence-policy</a>

### **Other Important Information**

Please visit the Registrar's website at: <a href="https://www.ucalgary.ca/registrar/registration/course-outlines">https://www.ucalgary.ca/registrar/registration/course-outlines</a> 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 <a href="https://www.ucalgary.ca/registrar/registration/course-outlines">https://www.ucalgary.ca/registrar/registration/course-outlines</a>

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.

Anderson, L. W., & Krathwohl, D. R. (2001). A Taxonomy for Learning, Teaching and Assessing: A revision of Bloom's Taxonomy of educational objectives. Longman.

ii Yadav, A., Hong, H., & Stephenson, C. (2016). Computational Thinking for all: Pedagogical approaches to embedding 21st century problem solving in K-12 classrooms. *TechTrends*, 60(6), 565–568. https://doi.org/10.1007/s11528-016-0087-7

Palop, B., Díaz, I., Rodríguez-Muñiz, L.J. et al. Redefining computational thinking: A holistic framework and its implications for K-12 education. *Education & Information Technologies 30*, 13385–13410 (2025). https://doi.org/10.1007/s10639-024-13297-4
Chowdhury, T. (2025, April). Computational thinking with computer vision: Developing AI competency in an introductory computer science course. In *Proceedings of the AAAI Conference on Artificial Intelligence* (Vol. 39, No. 28, pp. 29004-29012); https://arxiv.org/abs/2503.19006
Børsen Hansen, S., Hachmann, R., & Dohn, N. B. (2023). Computational thinking beyond computer science. In *Developing a didactic framework across and beyond school subjects* (1st ed., Chapter 21). Routledge. https://doi.org/10.4324/9781003367260-21



# WERKLUND SCHOOL OF EDUCATION UNDERGRADUATE PROGRAMS IN EDUCATION

van Borkulo, S.P., Chytas, C., Drijvers, P. et al. Spreadsheets in secondary school statistics education: Using authentic data for computational thinking. *Digital Experiences in Math Education 9*, 420–443 (2023). https://doi.org/10.1007/s40751-023-00126-5

<sup>iv</sup> Andreesen, M. (2023, 29 September). The Techno-Optimist Manifesto. https://a16z.com/the-techno-optimist-manifesto/dreessen