

Department of Education

COURSE OUTLINE – Fall 2026

ED 2400 (A2 & B2) Learning with Technology 3 (3-0-0) 45 Hours for 15 Weeks

Northwestern Polytechnic acknowledges that our campuses are located on Treaty 8 territory, the ancestral and present-day home to many diverse First Nations, Metis, and Inuit people. We are grateful to work, live and learn on the traditional territory of Duncan's First Nation, Horse Lake First Nation and Sturgeon Lake Cree Nation, who are the original caretakers of this land.

We acknowledge the history of this land and we are thankful for the opportunity to walk together in friendship, where we will encourage and promote positive change for present and future generations.

INSTRUCTOR:	Cara Leaf	PHONE:	780-539-2879
OFFICE:	A313 A	E-MAIL:	Cleaf@nwpolytech.ca
OFFICE HOURS:	Anytime by appointment		

CALENDAR DESCRIPTION:

This course introduces students to foundational concepts and application of educational technology in the 21st-century classroom. Students will move beyond using technology to evaluating and designing learning experiences that leverage the unique affordances of digital tools to strengthen learning for children and adolescents. Students will gain pedagogical strategies linked to school curriculum and understand the role of educators in equipping K-12 learners with digital literacy skills to better prepare them for global and digital citizenship.

COREQUISITE: ED2510

REQUIRED TEXT/RESOURCE MATERIALS:

Maloy, R. W., Verock, R.-E. A., Edwards, S. A., & Trust, T. (2020). Transforming learning with new technologies (4th Ed.). Pearson.

DELIVERY MODE(S): On-campus

LEARNING OUTCOMES:

Alberta Teaching Quality Standard (TQS)

The Bachelor of Education program prepares students for Interim Professional Certification with Alberta Education. Learning Outcomes support students to begin demonstrating competencies and indicators of the Alberta Teaching Quality Standard.

Through the completion of ED2550, students will:

- examine Alberta Education resources and other guidance, such as the International Society for Technology in Education (ISTE) standards for teachers in the classroom
- identify key issues and trends in the field of educational technology for K-12 students
- explore transformational ways that technologies impact teaching and learning in schools
- examine the meaning and importance of digital literacies
- describe elements of instructional design using technology, including outcomes-based content, teaching methods and materials, and student learning assessments
- integrate technology in planning, delivering, and evaluating learning experiences for students
- evaluate current K-12 educational technologies and educational resources for successful learning across the curriculum
- develop pedagogical strategies for successfully equipping children and adolescents with digital literacy skills and an understanding of global and digital citizenship
- examine physical and digital technologies to promote problem solving and inquiry-based learning
- explore technologies that enhance learning through online interaction and collaboration
- investigate how digital technologies expand learning opportunities through differentiating instruction for K-12 students
- investigate how technology can be integrated into self-assessment and reflective practice

TRANSFERABILITY:

Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at the Alberta Transfer Guide main page

<http://www.transferalberta.alberta.ca>.

**** For courses with alpha (letter) grading, a grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability.**

EVALUATIONS:

Check Your Understanding	5
Weekly Application Exercises	5
Assignment I: Education Technology Goals	10
Assignment II: Designing Instruction with Technology	10
Assignment III: Digital Literacy & Citizenship	15
Unit I Exam	12.5
Unit II Exam	12.5
Final Project:	30
• Reflection Presentation 10% (week 13 & 14) • Final DTP Site: 20% (TBA exam week - due date set by department)	

GRADING CRITERIA:

Please note that most universities will not accept your course for transfer credit **IF** your grade is less than C-.

Grading Chart for courses with Alpha Grading:

To progress in the Bachelor of Education program, students must achieve a minimum grade of C- in all Education (ED) courses. Any grade below C- does not meet the passing requirement and will require the student to repeat the course

Alpha Grade	4-point Equivalent	Percentage Guidelines		Alpha Grade	4-point Equivalent	Percentage Guidelines
A+	4.0	95-100		C+	2.3	67-69
A	4.0	85-94		C	2.0	63-66
A-	3.7	80-84		C-	1.7	60-62
B+	3.3	77-79		D+	1.3	55-59
B	3.0	73-76		D	1.0	50-54
B-	2.7	70-72		F	0.0	00-49

COURSE SCHEDULE/TENTATIVE TIMELINE:

Week	Content	Readings & Assignments
1	Course Introduction	Course Introduction • Outline/ Course Text/Timeline • Assessment Guidelines
2	Becoming a 21 st Century Teacher	Chapter 1 Homework: Complete Check Your Understanding – Ch 1 Alberta Education Resources (<i>TQS and the ISTE Standards for Students and Educators</i>)

3	Understanding Educational Technology Issues and Trends	Chapter 2 Homework: Complete Check Your Understanding- Ch 2
4	Transforming Learning with Unique, Powerful Technology	Chapter 3 Homework: Complete Check Your Understanding – Ch 3 Assignment I : Due End of Week (Sunday before Midnight)
5	Designing Instruction with Technology	Chapter 4 Homework: Complete Check Your Understanding – Ch 4 SAMR Model for Integrating Technology Lecture
6	Teaching Information Literacy and Digital Citizenship	Chapter 6 Homework: Complete Check Your Understanding—Ch6 5E Instructional Model Lecture Assignment II: Due End of Week (Sunday before Midnight)
7	Solving Problems & Designing Solutions through Coding, Makerspaces & Serious Games	<i>Unit 1 Exam</i> Chapter 8 Homework: Complete Check Your Understanding—Ch 8
8	Digital Literacy, AI & Alberta Education Resources	Alberta's Digital Literacy Framework for K-12 Alberta School Board Association – AI Policy Alberta's Learning and Technology Policy Framework (LTPF)
9	Technology Enhanced Pedagogy	Assignment III DUE before first class begins Be prepared to present your lessons this week
10	Communicating and Collaborating with Social Technologies	Chapter 9 Homework: Complete Check Your Understanding—Ch9
11	Fall Break	
12	Differentiating Instruction with Technology Empowering Learners through Performance Assessment and Reflection	Chapter 11 Lecture Complete Check Your Understanding—Ch 11 Chapter 12 Lecture Complete Check Your Understanding—Ch 12
13	Prepare and Reflect	<i>Unit 2 Exam</i> Final Reflection Presentations (students will present and complete peer evaluations this week) Attendance Required
14 & 15	Presentations	Final Reflection Presentations (students will present and complete peer evaluations this week) Attendance Required Final Project due during exam week (date set by the department)

STUDENT RESPONSIBILITIES:

Students must read, understand and comply with Northwestern Polytechnic academic policies.

****Note:** all Academic and Administrative policies are available at NWP Policies | Northwestern Polytechnic (nwpolytech.ca)

STATEMENT ON ACADEMIC MISCONDUCT:

Academic Misconduct will not be tolerated. For a more precise definition of academic misconduct and its consequences, refer to the Student Rights and Responsibilities policy available

<https://www.nwpolytech.ca/about/polytechnic-leadership/policies-directory>.

****Note:** all Academic and Administrative policies are available on the same page.

ADDITIONAL INFORMATION

Class Attendance, Engagement, & Professional Participation

In accordance with official Northwestern Polytechnic Academic Policy, regular attendance and active participation are mandatory for student success. Missed in-class activities due to absences cannot be made up and will result in a grade of zero. Any student who misses more than 15% of scheduled instructional classes may be officially barred from writing the final examination or submitting the final project. This action results in a grade designation of *"Debarred from Exam"* on your academic transcript.

Arriving late or leaving early disrupts the learning environment. Repeated instances of unexcused lateness or early departures will be mathematically compiled and treated as full absences toward the 15% debarment threshold

Time Management

The expectation for this course is that students read/review the text material and D2L content according to the class schedule. Adopting and adhering to effective learning habits in this course will likely take up a great deal of time, so plan your schedule accordingly. It is difficult to catch up once a student falls behind in the readings and exercises. Assignments missed will be recorded as zero. Assignments are due on the dates set by the instructor. Even if you are absent on the assignment due date, you have access to D2L and can be submitted electronically anytime. **No late assignments will be accepted.**

There is a final project in this course which will be due during the final exam week on the day/time set by the Registrar

TESTING AND EXAM POLICIES

All quizzes and exams will be written as scheduled. No rewrites will be given. If there is an excusable absence, an exemption will be given for that quiz. If the absence is not excusable, a grade of 0% will be given.

EMAIL CORRESPONDENCE:

Email correspondence to your instructor must be sent from your NWP student email account. Please include the course name and number in the subject line. Emails should be professionally formatted and include correct spelling and grammar, and a reference to course material and/or textbook pages, etc. Emails that do not follow the above requirements may not be responded to.