

DEPARTMENT of Education

COURSE OUTLINE – Fall 2025

CD 2050 (EC): Science, Math, and Social Knowledge – 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:

Amanda Young

OFFICE:**OFFICE HOURS:**

By Appointment via
Teams

PHONE: N/A

E-MAIL: ayoung@nwpolytech.ca

CALENDAR DESCRIPTION: This course introduces students to science, mathematical, and social knowledge. The course emphasis is on integrating social, physical, and logical mathematical experiences in the preschool child's environment. Students learn to use developmentally appropriate curriculum to facilitate the young child's construction of knowledge in these areas.

PREREQUISITE(S): Successful completion of the first year or consent of the Department.

COREQUISITE(S): None

REQUIRED MATERIALS: No textbook required

Students are responsible for all fees associated with ProctorU, a live proctoring service for online exams. Fees are paid when you schedule your exams through ProctorU.

Pricing per exam is as follows:

60 minutes or less - \$16 USD

61-120 minutes - \$25 USD

121 - 180 minutes - \$31 USD

DELIVERY MODE(S): Online asynchronous.

LEARNING OUTCOMES: Upon successful completion of this course, students will be able to:

- Recognize a social-constructivist curriculum and explain how it supports children's science, mathematical and social knowledge.
- Outline the steps in scientific inquiry.
- Recognize scientific knowledge, mathematical knowledge and social knowledge in early childhood programs.
- Plan, implement and evaluate science based early childhood curriculum.
- Plan, implement and evaluate mathematical based early childhood curriculum.
- Plan, implement and evaluate social based early childhood curriculum

TRANSFERABILITY:

Please consult the Alberta Transfer Guide for more information. You may check 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:

All submitted work is graded according to the grading criteria or rubric set for the learning activity or assignment submitted. Assignments: 50% (16.67% each), Learning Activities: 40% (Only 1 randomly selected from each unit will be graded), Quizzes 10% (2% each 5 total). Assignment details and specific instructions will be discussed in My Class. Assignments and learning activities must be submitted in the Dropbox on My Class by 11:59 p.m. on the due date.

GRADING CRITERIA:

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

Grading Chart for courses with Alpha Grading:

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

Grades for this course will be assigned as a percentage. The minimum passing grade is 60%.

COURSE SCHEDULE/TENTATIVE TIMELINE:

Module One: September Total Learning Activities: 2 Total Assignments: 1 Total Quizzes: 2	September 12 th Course Outline Quiz September 13 th Learning Activity 1 and 2 (only 1 will be randomly selected and graded) September 21 st Quiz 1 September 26 th Assignment
Module Two: October/November Total Learning Activities: 7 Total Assignments: 1 Total Quizzes: 1	October 19 th Learning Activity 1,2,3,4,5,6,7 (only 1 will be randomly selected and graded) October 20 th Quiz 2 November 2 nd Assignment
Module Three: November/December Total Learning Activities: 7 Total Assignments: 1 Total Quizzes: 2	November 17 th Learning Activity 1,2,3,4,5,6,7 (only 1 will be randomly selected and graded) November 22 nd Quiz 3 December 7 th Assignment December 7 th Final Cumulative Quiz

All work is due by 11:59 pm on the dates indicated above. A deduction of 5% per day for up to 10 days will be applied for late learning activities, assignments, discussion posts, and discussion responses; if no submission is made for these items after 10 days the mark will be a 0. Quizzes will receive a 0% if they are not completed on the above dates.

STUDENT RESPONSIBILITIES:

NWP expects students' conduct to be in accordance with basic rights and responsibilities. Please refer to the NWP calendar regarding rights and responsibilities.

In addition,



1. Students must be familiar with the Distance Education Student Handbook and any regulations, policies, and conduct that apply to students studying via online delivery, as outlined in the calendar.
2. Meet all submission deadlines.
3. Participate in online discussion boards.
4. To have computer hardware and software that meets standards set for online delivery.

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/administration/policies/index.html>.

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

Additional Information:

It is the right of the student and of the instructor to a favourable learning/teaching environment. It is the responsibility of the student and the instructor to engage in appropriate adult behaviours that positively support learning. This includes treating others with dignity and respect and following the expectations outlined below.

Learning Activities

Each unit has special tasks for you to complete. These learning activities are to be submitted to your instructor for feedback and marking. They allow your instructor to monitor your learning throughout the course and to provide you with helpful feedback. Each learning activity will be looked at by your instructor. **However, only one per unit will be graded per unit. ALL LEARNING ACTIVITIES MUST BE COMPLETED.** Late learning activities will be penalized by a deduction of 5% per day up to a maximum of 10 days, after this a 0 will be the resulting mark. The rubric for learning activities can be found under Important Information and at the end of the learning activity description.

Assignments

These are an important part of your learning. Each unit assignment(s) must be completed and submitted to your instructor for feedback and marking. Your instructor has set specific deadlines for each of the assignments in this course. Late assignments will be penalized by a deduction of 5% per day up to a maximum of 10 days, after this a 0 will be the resulting mark. It is strongly recommended that you keep copies of each assignment before submitting them to your instructor. Save a copy on your computer or Google Drive. 50% of your final grade for the course is based on the quality of work shown in your assignments. For a complete assignment rubric please see the appropriate unit assignment folder.

Quizzes

The quizzes are in place to review the material in the course before the module assignments. This is done to support your learning and understanding of the material in the module before the assignment. All quizzes are open book. This means you can use your notes and the course material



during the time of the quiz. Quizzes will only be accessible on the dates indicated in the course schedule. There are no resubmissions for quizzes. Failure to complete the quiz during its availability will result in a mark of zero.

AI & Turnitin

- Completing learning activities and assignments is a critical part of learning and essential to the development of your professional practice as an educator. Therefore, in this course, all learners will pledge to use AI tools in ethical and appropriate ways.
 - For example, it would not be ethical or appropriate to use Generative Artificial Intelligence applications such as ChatGPT to write a draft of a learning activity or assignment and submit it as your own work.
 - In comparison, it would be ethical and appropriate for you to use AI tools such as Spell Check or Grammarly to identify spelling and grammar errors in your own work so you can correct them before submission.
 - The use of Generative Artificial Applications such as ChatGPT without proper citation will be considered plagiarism and treated as such using Northwestern Polytechnic's Academic Misconduct Procedures. Assignments found to have been created using AI/bots will not be graded and no resubmissions will be accepted. Additional penalties may also be applied to your participation grade.
 - If you require additional clarity on the use of AI in this course, please reach out to your instructor.

Additional Information

- Names/Pronouns: At the start of the course, my list of students' names is based on the register. If you would prefer to be called something else, please let me know, and I will adjust my list accordingly, and use your preferred name from that point on. You should feel free to use your preferred given name on all essays and submitted assignments. (If your preferred surname varies from the name under which you are registered, I may need occasional reminders.) If you want to tell me your pronouns, you should feel free to do so. I will respect your pronouns. All students are expected to respect their classmates' preferred names and pronouns.
- Communication: Please keep communication lines open. Ask questions, email me, seek me out and let me know if you are struggling with class content or deadlines. I am more than willing to help you in your learning so you can soak up all that there is to learn. However, I cannot help you if I do not know you need help. Communication is key!
- Crisis Management: I'm not a monster, but I'm not psychic, either. If something goes wrong in your life, I won't automatically know. If you let me know, I will work with you to help you keep up/catch up in the course. You are human and crises happen to us all. I will happily work with you to ensure they don't derail your academic career.
- Grades: How you do on assignments and in class has no bearing on how I view you as a person. Although marking can often be subjective, I do my utmost to grade the quality of the work based on the rubrics that are included. You are separate from your work, and we are entitled to bad days. Please understand that I am more interested in your learning/growth than your grades, as you should be too.
- Students will be allowed to make one re-submission during the duration of the course. Re-submissions can be completed for one assignment or one learning activity for any module in the course. **There is only one resubmission.** Resubmissions will be accepted during the last week of the course from December 7, 2025, to December 12, 2025. The resubmission is

in place to help you apply feedback directly and increase your grade in the course. Students must notify the instructor via email when a re-submission is made so the instructor knows the student has resubmitted. In the email, the student must include the course number, the student's full name, the learning activity and/or assignment details, and the date of re-submission.

USING PROCTORU:

This course uses ProctorU Live for online exams. To utilize this service, you are required to complete the following steps:

- Create a ProctorU account by clicking the ProctorU link in the course.
- Download and install the Guardian Web Browser, Google Chrome, and the ProctorU extension.
- Schedule each exam at least 3 days (72 hours) in advance. If you miss this deadline, you cannot take the exam.
- Pay for the proctoring service. The fees are exclusively your responsibility and in no event shall be the responsibility of Northwestern Polytechnic.

For more detailed instructions [click here](#), and for video instructions [click here](#).

Before each exam, you must complete a room scan with your web camera, during which you will show your surroundings to a live proctor.

The invigilator will ask to view (but not collect or store) your student identification to verify your identity and will remotely access your computer to unlock the exam. When monitoring your actions via video streaming, the invigilator may possibly record your actions if they suspect academic integrity behavioural issues. You will be verbally notified if/when recording begins.

The collection of and access to the personal information listed above is permitted under subsection 33(c) of the *Freedom of Information and Protection of Privacy Act*, RSA 2000, c F-25, which states, “No personal information may be collected by or for a public body unless that information relates directly to and is necessary for an operating program or activity of the public body.” In addition, subsection 39(4) states, “A public body may use personal information only to the extent necessary to enable the public body to carry out its purpose in a reasonable manner.”

Records Retention: Any video records of you created by ProctorU will be kept by ProctorU for a maximum of 7 days in order to make a decision about any possible academic integrity infraction, after which time it shall be permanently deleted. All other personal information collected and stored by ProctorU within your profile account will be permanently deleted if the account has not been used after one year.

Consent to Store Personal Information Outside Canada

ProctorU is an American company. An agreement is in place between ProctorU and Northwestern Polytechnic by which ProctorU will take reasonable steps to protect your personal information from unauthorized access and disclosure. Information about how ProctorU protects your privacy can be found in their [Privacy Policy](#).

By using the ProctorU service via Northwestern Polytechnic, you consent to the storage of and access to your personal information outside of Canada.

This consent is in effect from the day you register with ProctorU and expires one year after completion of your exam.

Additional privacy and liability information regarding the use of ProctorU is available on the NWP website.