NORTHWESTERN POLYTECHNIC

DEPARTMENT of ACADEMIC UPGRADING

COURSE OUTLINE – Winter 2025

MA0113 (A3): Mathematics Grade 10-3 Equivalent – 5 (7.5-0-0)

112.5 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:	James Iverson	**PHONE:**	(780)539-2850
OFFICE:	C407	**E-MAIL:**	jiverson@nwpolytech.ca
OFFICE HOURS:	Tuesday 1:00-2:00PM, Friday 10:00-11:00PM or by appointment		

CALENDAR DESCRIPTION:

This course is a modularized course which covers unit pricing and currency exchange; earning an income; measurement including surface area and volume; conversion between SI and imperial units, Celsius and Fahrenheit temperature scales; angles and parallel lines; scale drawing of polygon figures; and trigonometry of right triangles.

PREREQUISITE(S):

Complete 1 of the following:

- MA0091 – Basic Mathematics III (5)
- Equivalent math placement test score
- MA0093 – Math Essentials (5)

REQUIRED TEXT/RESOURCE MATERIALS:

Borgen, Katharine. MathWorks 10 Workbook. Vancouver: Pacific Educational Press, 2010.

Non-graphing scientific calculator (TI-30XIIS recommended)
Internet access for MyClass and additional material

DELIVERY MODE(S):

- **On-campus (attend on-campus, in-person) –** This type of course will be delivered on campus in a specific location which will be indicated on the student timetable. Students are expected to fully attend in person.
- MA0113 is a modularized math course.

LEARNING OUTCOMES:

As a result of taking this course, students will gain the ability to:

- Calculate percent and solve problems that involve unit pricing using proportional reasoning
- Convert between Canadian currency and foreign currencies
- Calculate deductions, given the rate of deductions, and find net pay
- Convert measurement between SI units and imperial units
- Solve problems, using SI and imperial units, that involve the surface area and volume of general and complex 3-D object
- Perform conversions such as between mass and volume, and temperature scales
- Solve problems involving angles and pairs of angles, and parallel, non-parallel, perpendicular and transversal lines
- Identify images that are not similar to the original diagrams
- Solve problems that require the manipulation and application of formulas related to the Pythagorean Theorem and primary trigonometric ratios

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.This course is accepted at colleges and universities in Alberta as equivalent to Math 10-3.

** 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.**

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EVALUATIONS:

3 section tests (best 3 out of 4)	30 %
Midterm	25 %
Final Exam	45 %

GRADING CRITERIA:

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

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:

See table on last page.

STUDENT RESPONSIBILITIES:

In addition to the Student Rights and Responsibilities as set out in the Northwestern Polytechnic website (https://www.nwpolytech.ca/about/administration/policies/fetch.php?ID=69), the following guidelines will maintain an effective learning environment for everyone:

- Regular attendance is expected of all students in all mathematics courses. Your success in math is directly linked to your attendance. Attendance will be taken daily.
- Students are expected to be punctual. Arrive on time for classes and remain for the duration of scheduled classes.
- Refrain from disruptive talking or socializing during class time.

- Be respectful of others regarding food or beverages in the classroom. Clean up your eating area and dispose of garbage.
- Recycle paper, bottles, and cans in the appropriate containers.
- Children are not permitted in the classrooms.
- Students are expected to notify the instructor of any extenuating circumstances.
- Students are expected to silence cell phones during class time. No unspecified electronic devices will be allowed in exams.

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 at https://www.nwpolytech.ca/about/administration/policies/index.html.

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

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MA0113 Tentative Test Schedule for Winter 2025

Test #	% towards final grade	Topics	Recommended Test Date	Date written	Mark
1	10%	Chap. 1: Unit Pricing and Currency Exchange & Chap. 2: Earning An Income	January 27		
2	10%	Chap. 3: Length, Area, and Volume & Chap. 4: Mass, Temperature, and Volume	February 25		
Midterm Exam	25%	All of the Above	February 27		
3	10%	Chap. 5: Angles and Parallel Lines & Chap. 6: Similarity of Figures	March 21		
4	10%	Chap. 7: Trigonometry of Right Triangles	April 9		
Final Exam	45%	All of the Above	TBA (April 14-23) 3 hour exam		

*****All tests must be completed by April 9th.**

*****Midterms must be completed by March 6th**