NORTHWESTERN POLYTECHNIC

DEPARTMENT of ACADEMIC UPGRADING

COURSE OUTLINE – Winter 2025

MA0091 (B3): Basic Mathematics III – 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 program of study which includes a review of basic computational skills, ratios and proportions, precents; an introduction to exponents, basic operations on polynomials, equations, basic algebraic word problems; fundamental of geometry, introduction to graphing, and statistics.

PREREQUISITE(S):

- Complete 1 of the following:
  - MA0081- Basic Mathematics II (5)
  - Equivalent math placement test score

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REQUIRED TEXT/RESOURCE MATERIALS:

Package of MA0091 modules, 2022;
Non-graphing scientific calculator (TI-30XIIS recommended), Geometry set**;
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.
- MA0091 is a modularized math course.

LEARNING OUTCOMES:

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

- Simplify expressions with whole numbers, decimals, integers, and fractions using the rules for order of operations
- Write a ratio to compare two quantities with same units from real life situations
- Compare unit rates using number relation symbols
- Solve real life problems using proportions
- Solve general applied percent problems such as interest, sales tax, commission, etc.
- Evaluate exponential expressions containing negative and positive exponents using the rules for order of operations
- Convert between scientific notations and standard from, and multiply and divide using scientific notation
- Identify the terminology of polynomials
- Solve more than one basic operations with polynomials using the rules for order of operations
- Solve linear equations with fractions and/or parenthesis
- Solve a formula for a specified variable and then evaluate
- Solve an inequality using addition and/or multiplication principles and graph the solution on a number line
- Solve a word problem by writing an equation

- Identify pairs of corresponding angles, interior angles, and alternate interior angles, and apply properties of transversals and parallel line to find measures of angles
- Calculate the measures of angles, chords, and/or radii using the circle properties
- Plot and construct graphs in a rectangular co-ordinate system and state the slope of a line containing points with co-ordinates
- Construct a line graph, pictograph, component graph, circle graph, histogram, and polygon suing the given data
- Construct a frequency table from raw data, and display the information
- Draw an inference using the central tendency of a set of raw data

TRANSFERABILITY: N/A

EVALUATIONS:

4 section tests (best 4 out of 5)	50 %
Midterm	20 %
Final Exam	30 %

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

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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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MA0091 Tentative Test Schedule for Winter 2025

Test #	% towards final grade	Topics	Recommended Test Date	Date written	Mark
1	12.5%	Review & Ratio and Percent	January 24		
2	12.5%	Rate and Proportion & Intro to exponents	February 10		
3	12.5%	Intro to Polynomials & Statistics	March 7		
Midterm Exam	20%	All the Above	March 11		
4	12.5%	Equations & Language of Algebra	March 26		
5	12.5%	Fund. Of Geometry & Intro to Graphing	April 9		
Final Exam	30%	All of the Above	TBA (April 14-23) 3 hour exam		

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

*****Midterm must be completed by March 18th**