DEPARTMENT OF ACADEMIC UPGRADING

COURSE OUTLINE – Winter 2024

MA0093 (A3): Math Essentials – 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: Doris LaChance **PHONE:** (780)539-2234
OFFICE: C417 **E-MAIL:** DLaChance@nwpolytech.ca
OFFICE HOURS: TBD or by appointment

CALENDAR DESCRIPTION:
This course is a modularized program of study which covers basic computational skills, ratios and proportions, percents; an introduction to exponents; equations and formulas; fundamentals of geometry, introduction to graphing, and statistics.

PREREQUISITE(S)/COREQUISITE:
Complete 1 of the following:

- MA0081 – Basic Mathematics II (5)
- Equivalent math placement test score

REQUIRED TEXT/RESOURCE MATERIALS:
Package of MA0093 modules, 2022;
Non-graphing scientific calculator (TI-30XIIS recommended), Geometry set**;
Internet access to MyClass and additional material.

DELIVERY MODE(S):
MA0093 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
- Solve simple linear equations with additive inverse and/or multiplication by a reciprocal
- 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:

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

**Note: Even though 50% is a passing mark, a mark of at least 60% is recommended for success in future courses.

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 college website, 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.

MA0093 Tentative Test Schedule for Winter 2024

NORTHWESTERN POLYTECHNIC

Test #	% towards final grade	Topics	Recommended Test Date	Date written	Mark
1	10%	Review & Ratio and Proportion	January 26		
2	10%	Percent & Intro to Exponents	February 16		
Midterm Exam	25%	All the Above	February 27		
3	10%	Equations & Fund. Of Geometry	March 19		
4	10%	Intro to Graphing & Statistics	April 12		
Final Exam	45%	All of the Above	TBA (April 17-24) 3 hour exam		

*****All tests must be completed by April 12th.**

*****Midterm must be completed by March 5th.**