DEPARTMENT OF ACADEMIC UPGRADING

COURSE OUTLINE – Fall 2023

MA0110 (A2, B2, C2): Mathematics Grade 10-C 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 (A2):	Marty Tingstad	**PHONE:**	(780)539-2071
OFFICE:	L224	**E-MAIL:**	MTingstad@nwpolytech.ca
OFFICE HOURS:	TBD or by appointment		

INSTRUCTOR (B2):	Doris LaChance	**PHONE:**	(780)539-2234
OFFICE:	C417	**E-MAIL:**	DLaChance@nwpolytech.ca
OFFICE HOURS:	TBD or by appointment		

INSTRUCTOR (C2):	James Iverson	**PHONE:**	(780)539-2850
OFFICE:	C407	**E-MAIL:**	JIverson@nwpolytech.ca
OFFICE HOURS:	Monday and Thursday 10:00-11:00 AM or by appointment		

CALENDAR DESCRIPTION:
This is a modularized course which covers measurement including surface area and volume, introduction to trigonometry, numbers, roots, and exponents, polynomial multiplication and factoring, relations and functions, linear functions, and system of equations.

PREREQUISITE(S)/COREQUISITE:
Complete 1 of the following:
- MA0091 – Basic Mathematics III (5)
- Equivalent math placement test score

REQUIRED TEXT/RESOURCE MATERIALS:

Package of MA0110 modules, 2022;

Non-graphing scientific calculator (TI-30XIIS recommended);

Internet access for MyClass and additional material.

DELIVERY MODE(S):

MA0110 is a modularized math course.

LEARNING OUTCOMES:

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

- 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
- Solve similar right triangles using proportions, trigonometric ratios, and/or Pythagorean theorem
- Calculate prime factors, greatest common factor, and /or nth root by applying in real life situations
- Simplify expressions with integral and rational exponents using the rules for order of operations
- Factor a polynomial expression using greatest common factor, product and sum, and/or difference of two squares
- Determine the domain and range of a relation, and prove if a relation is a function
- Determine the equation of a line if a graph, a point and the slope, two points, or slope and y-intercept is given
- Graph a linear functions by constructing a table of values, determining and plotting x and y-intercepts, or using slope and y-intercepts
- Solve systems of linear equations with two unknown using graphing, substitution, or elimination

TRANSFERABILITY:

This course is listed in the Alberta Transfer Guide. It is accepted at colleges and universities in Alberta as equivalent to Math 10C. 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.

** 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:

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

**Note: Even though 50% is a passing mark, a mark of at least 65% 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 Northwestern Polytechnic 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.

MA0110 Tentative Test Schedule for Fall 2023

Test #	% towards final grade	Topics	Recommended Test Date	Date written	Mark
1	12.5%	Numbers and Roots & Exponents	September 26		
2	12.5%	Polynomials	October 12		
3	12.5%	Relations and Functions & Trigonometry	October 30		
Midterm Exam	20%	All of the Above	November 1		
4	12.5%	Measurement	November 20		
5	12.5%	Linear Functions & Systems of Equations	December 8		
Final Exam	30%	All of the Above	TBA (December 14-21) 3 hour exam		

***All tests must be completed by December 8th.
***Midterm must be completed by November 8th.