ORIGINAL COURSE IMPLEMENTATION DATE: September 2009
REVISED COURSE IMPLEMENTATION DATE: January 2023
COURSE TO BE REVIEWED (six years after UEC approval)**:** June 2028
Course outline form version: 06/18/2021

OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

Course Code and Number: MATH 076	**Number of Credits:** 1.5 Course credit policy (105)
Course Full Title: Intermediate Math II **Course Short Title:**	
Faculty: Faculty of Education, Community, and Human Development	**Department:** Upgrading and University Preparation

Calendar Description:

Students will review primes, factors, multiples, integers, formulas, expressions, equations, and polynomials. Course topics include percent applications, geometry, graphing, introduction to algebra and trigonometry, powers, roots, and scientific notations.

Prerequisites (or NONE):	MATH 075 or UUP department permission (assessment is required).
Corequisites (if applicable, or NONE):	NONE
Pre/corequisites (if applicable, or NONE):	NONE

Antirequisite Courses *(Cannot be taken for additional credit.)*

Former course code/number: **MATH 072**

Cross-listed with: **NONE**

Equivalent course(s): **NONE**

(If offered in the previous five years, antirequisite course(s) will be included in the calendar description as a note that students with credit for the antirequisite course(s) cannot take this course for further credit.)

Typical Structure of Instructional Hours

Lecture/seminar	22.5
Tutorials/workshops	22.5
Total hours	**45**

Labs to be scheduled independent of lecture hours: ☒ No ☐ Yes

Course Details

Special Topics course: **No**
(If yes, the course will be offered under different letter designations representing different topics.)

Directed Study course: **No**

Grading System: **Letter Grades**

Delivery Mode: **May be offered in multiple delivery modes**

Expected frequency: **Every semester**

Maximum enrolment (for information only)**:** 24

Prior Learning Assessment and Recognition (PLAR)

PLAR is available for this course.

Transfer Credit *(See **bctransferguide.ca**.)*

Transfer credit already exists: **No**

Submit outline for (re)articulation: **No**
(If yes, fill in transfer credit form.)

Department approval	**Date of meeting:**	November 2021
Faculty Council approval	**Date of meeting:**	December 3, 2021
Undergraduate Education Committee (UEC) approval	**Date of meeting:**	June 17, 2022

Learning Outcomes

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

1. Define and use key vocabulary words such as, integer, rational number, co-ordinates, and polynomial.
2. Simplify and evaluate expressions involving powers, roots, and scientific notation.
3. Perform operations on polynomials.
4. Solve problems involving variable expressions, percent problems, and geometry problems.
5. Interpret and use formulae for calculation of area and volume.
6. Use the Cartesian coordinate system to graph linear equations and find the slope of a line.
7. Use basic trigonometric ratios (sine, cosine, and tangent) and the Pythagorean theorem to solve problems involving right triangles.
8. Use the basic operations and exponential and trigonometric functions on a scientific calculator.

After completion of Math 075 and Math 076, students will meet the outcomes as described in the Intermediate Level – Algebraic Mathematics in the 2021 – 2022 Adult Basic Education Articulation Guide available at https://www.bctransferguide.ca/search/abe.

Recommended Evaluation Methods and Weighting *(Evaluation should align to learning outcomes.)*

Final exam:	30%	Quizzes/tests:	70%		%
	%		%		%

Details:

NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.

Texts and Resource Materials *(Include online resources and Indigenous knowledge sources. Open Educational Resources (OER) should be included whenever possible. If more space is required, use the Supplemental Texts and Resource Materials form.)*

	Type	Author or description	Title and publication/access details	Year
1.	Textbook	Hutchison, D, Berman, B, & Baratto, S.	Prealgebra Ed: 4; McGraw-Hill	2014
2.				
3.				
4.				
5.				

Required Additional Supplies and Materials *(Software, hardware, tools, specialized clothing, etc.)*

Scientific calculator

Course Content and Topics

Module topics include:

- Equations with rational coefficients (review)
- Application problems (percent, number, mixture, motion, geometry problems)
- Powers, roots, and scientific notation
- Polynomials (adding, subtracting, multiplying, introduction to factoring)
- Graphing equations
- Geometry (angles, lines, and triangles)
- Trigonometry (right angle)