ORIGINAL COURSE IMPLEMENTATION DATE: September 1995

REVISED COURSE IMPLEMENTATION DATE: September 2018

COURSE TO BE REVIEWED (six years after UEC approval): January 2021

Course outline form version: 10/27/2017

OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

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

Course Code and Number: MATH 095	**Number of Credits:** 2 Course credit policy (105)

Course Full Title: Provincial-Level Math: Principles of Math II
Course Short Title: Principles of Math II

Faculty: Faculty of Access and Continuing Education	**Department:** Upgrading and University Preparation

Calendar Description:

MATH 094 and MATH 095 are together equivalent to provincial Mathematics 12. Logarithmic and exponential functions, trigonometric functions, and geometric and arithmetic sequences and series and as time permits binomial theorem, matrices, and vectors.

Prerequisites (or NONE):	MATH 094 with a C or better.
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: N/A
Cross-listed with: N/A
Dual-listed with: N/A
Equivalent course(s): N/A

Special Topics
This course is offered with different topics:
☒ No ☐ Yes

If yes, different lettered courses may be taken for credit:
☐ No ☐ Yes, repeat(s) ☐ Yes, no limit

Transfer Credit
Transfer credit already exists: *(See **bctransferguide.ca**.)*
☒ No ☐ Yes

Submit revised outline for rearticulation:
☒ No ☐ Yes

Typical Structure of Instructional Hours

Lecture/seminar hours	60
Tutorials/workshops	
Supervised laboratory hours	
Experiential (field experience, practicum, internship, etc.)	
Supervised online activities	
Other contact hours:	
Total hours	**60**

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

Grading System
☒ Letter Grades ☐ Credit/No Credit

Expected Frequency of Course Offerings:
Annually: Winter

Department / Program Head or Director: Greg St. Hilaire	**Date approved:**	January 10, 2018
Faculty Council approval	**Date approved:**	January 31, 2018
Dean/Associate VP: Sue Brigden	**Date approved:**	January 31, 2018
Campus-Wide Consultation (CWC)	**Date of posting:**	February 16, 2018
Undergraduate Education Committee (UEC) approval	**Date of meeting:**	February 23, 2018

Learning Outcomes:

Upon successful completion of this course, students will be able to:
1. solve exponential and logarithmic equations
2. manipulate and graph exponential and logarithmic functions
3. make appropriate use of exponential and logarithmic concepts to solve applied problems
4. solve trigonometric equations
5. manipulate and graph circular functions and their inverses
6. make appropriate use of trigonometric concepts to solve applied problems
7. identify and analyze sequences, especially arithmetic and geometric sequences
8. analyze and evaluate the sums of a finite or an infinite series
9. use technology to analyze the mathematical topics of MATH 095

Prior Learning Assessment and Recognition (PLAR)

☒ Yes   ☐ No, PLAR cannot be awarded for this course because

Typical Instructional Methods *(Guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion.)*

Lectures mixed with problem sessions. Graphing calculators are used to aid in the understanding of topics.

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

Typical Text(s) and Resource Materials

	Author (surname, initials)	Title (article, book, journal, etc.)	Current ed.	Publisher	Year
1.	Bittinger, Beecher, et al	Algebra and Trigonometry, Graphs and Models	5th	Addison Wesley	2006
2.			☐		
3.			☐		
4.			☐		

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

A graphing calculator (without computer algebraic system)

Typical Evaluation Methods and Weighting

Final exam:	40%	Assignments:	15%	Field experience:	%	Portfolio:	%
Midterm exam:	15%	Project:	%	Practicum:	%	Other:	%
Quizzes/tests:	30%	Lab work:	%	Shop work:	%	Total:	100%

Details (if necessary):

Typical Course Content and Topics

In MATH 095 students examine and apply:
1. logarithmic and exponential functions and equations
2. trigonometric functions and equations
3. geometric and arithmetic sequences and series

Additional topics covered as time allows: the binomial theorem, matrices and vectors