COURSE OUTLINE

TERM: Fall 2017	**COURSE NO.**: BMTH 047
INSTRUCTORS:	**COURSE NAME**: Advanced Foundations Mathematics 1
OFFICE:	**SECTION NO.**: **COURSE CREDITS:** 1.0

COURSE FORMAT: Self-paced1.5 hours in class and 1.5 hours other mode of delivery such as tutorial in the ABE Learning Lab or on-line using Moodle. This is a self-paced course; students may complete this course in 15 or less weeks.

PREREQUISITE: BMTH 034 ***or*** completion of the Adult Basic Education Math Assessment.

RECOMMENDED FOLLOW-UP COURSES: BMTH 048

LEARNING OUTCOMES: Upon successfully completing this course students should be able to:

- Demonstrate an understanding of the real number system and be able to perform calculations involving integers.
- Perform calculations involving rational numbers and solve problems dependent on an understanding of rational numbers.
- Apply the rules for order of operations.
- Demonstrate the use of absolute value in order of operations calculations.
- Solve problems involving percentage.
- Solve a rate problem that requires the isolation of a variable.
- Group like terms in a polynomial.
- Isolate and solve for a variable in a linear equation.
- Model and solve linear equations.
- Solve problems involving ratio, proportion and variation.
- Demonstrate an understanding of the properties of exponents.
- Determine and compare rates and unit rates in various contexts.
- Determine whether two lines are parallel or perpendicular.
- Draw and explain the relationship between the slope of a graph and a rate.
- Solve a contextual problem that involves the relationships among scale factors, areas and volumes.
- Model and solve problems that involve systems of linear inequalities in two variables.
- Graph the boundary line between two half planes for each inequality in a system of linear inequalities, and justify the choice of solid or broken lines.
- Determine and explain the solution region that satisfies a linear inequality, using a test point when given a boundary line.

REQUIRED TEXT: Pearson Custom Mathematics
ABE Foundations Mathematics
BMTH 047 and BMTH 048
Capilano University

COURSE CONTENT:

Unit 1	The Real Numbers and Their Representations.
Unit 2	The Basic Concepts of Algebra.
Unit 3	Graphs and Systems of Equations and Inequalities.

EVALUATION PROFILE: Student evaluation will be based upon the learning outcomes for ABE Advanced Level, which is articulated in the *Adult Basic Education British Columbia's Public Post-Secondary Institution Articulation Handbook*.

Credit will be determined by evaluation as follows:

Unit 1	20%	The Real Numbers and Their Representations.
Unit 2	20%	The Basic Concepts of Algebra.
Unit 3	20%	Graphs and Systems of Equations and Inequalities.
Quizzes	20%	
Final Exam	20%	
Total	100%	

GRADING PROFILE:

Grade	Numerical Range	Grade Point Equivalent
A+	90-100	4.33
A	85-89	4.00
A-	80-84	3.67
B+	77-79	3.33
B	73-76	3.00
B-	70-72	2.67
C+	67-69	2.33
C	63-66	2.00
C-	60-62	1.67
D	50-59	1.00
F	49 and below	0.00

Students not completing course work by the end of the term will receive a grade of NC (no credit). A grade will only be assigned after all course content has been evaluated.

OPERATIONAL DETAILS:

Examinations: Students may rewrite any examination without penalty.

University Policies: Capilano University has policies on Academic Appeals (including appeal of final grade), Student Conduct, Cheating and Plagiarism, Academic Probation and other educational issues. These and other policies are available on the University website.

Attendance: Students who will be absent for any reason should leave a voice or email message for their instructor ***prior*** to the start of class. ABE department policy is to place students attending less than 75% of classes in a subject on a "non-priority list". Students on this list register last (after all other students have registered).

Cheating/Plagiarism: All forms of cheating including plagiarism are serious offences. The instructor has the right to assign a "0" on the assignment or a grade of "NC" on the course. A second offence in any course may result in expulsion from the program.

Computer use policies: The misuse of a computer system (such as unauthorized access to other computer accounts or unauthorized use of system software) is not only unfair to other students but can result, at the instructor's discretion, in suspension of the offender's computer access in a course, which may result in an "NC" grade. Repeated offences may result in a permanent revoking of all computer privileges.

Emergency Procedures: Please read the emergency procedures posted on the wall of the classroom.