



COURSE OUTLINE: MTH050 - MATHEMATICS 050

Prepared: Heather Ferguson

Approved: Carolyn Hepburn, Dean, Indigenous Studies and Academic Upgrading

Course Code: Title	MTH050: MATHEMATICS 050				
Program Number: Name	8214: LBS - LEVEL5				
Department:	ACADEMIC UPGRADING/LBS				
Semesters/Terms:	18F, 19W, 19S				
Course Description:	This developmental course focuses on basic algebra, solving equations, and basic probability and statistics. Integers, rational numbers, exponents, polynomials, equations, graphing and various aspects of statistics and their application and display are featured.				
Total Credits:	5				
Hours/Week:	5				
Total Hours:	45				
Prerequisites:	MTH044				
Corequisites:	There are no co-requisites for this course.				
Substitutes:	MTH045				
This course is a pre-requisite for:	CHM 94, MTH 94, PHY 94				
Essential Employability Skills (EES) addressed in this course:	EES 3 Execute mathematical operations accurately. EES 4 Apply a systematic approach to solve problems. EES 5 Use a variety of thinking skills to anticipate and solve problems. EES 6 Locate, select, organize, and document information using appropriate technology and information systems.				
Course Evaluation:	Passing Grade: 70%, B				
Books and Required Resources:	Mathematics MBF3C-B Lessons 1-5 by Independent Learning Centre Mathematics MBF3C-B Lessons 6-10 by Independent Learning Centre Mathematics MBF3C-B Lessons 11-15 by Independent Learning Centre Mathematics MBF3C-B Lessons 16-20 by Independent Learning Centre				
Course Outcomes and Learning Objectives:	<table><tr><th>Course Outcome 1</th><th>Learning Objectives for Course Outcome 1</th></tr><tr><td>1. Upon successful completion of this course, the student will demonstrate the ability to consolidate various numerical skills, and manipulate first-degree</td><td>1.1 Solve mathematical problems involving ratio and percent. 1.2 Use estimation to ensure an answer is reasonable. 1.3 Solve mathematical problems involving integers, rational numbers, exponents and powers. 1.4 Add and subtract algebraic expressions. 1.5 Add, subtract and multiply polynomials.</td></tr></table>	Course Outcome 1	Learning Objectives for Course Outcome 1	1. Upon successful completion of this course, the student will demonstrate the ability to consolidate various numerical skills, and manipulate first-degree	1.1 Solve mathematical problems involving ratio and percent. 1.2 Use estimation to ensure an answer is reasonable. 1.3 Solve mathematical problems involving integers, rational numbers, exponents and powers. 1.4 Add and subtract algebraic expressions. 1.5 Add, subtract and multiply polynomials.
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	Course Outcome 2	Learning Objectives for Course Outcome 2									
	2. Upon successful completion of this course, the student will demonstrate the ability to solve and graph linear equations.	2.1 Solve equations and verify solutions. 2.2 Find the slope of a line. 2.3 Interpret graphs and plot coordinates on a Cartesian plane. 2.4 Graph a linear equation using a table of values, and/or x and y intercepts, and/or slope and y intercept methods.									
	Course Outcome 3	Learning Objectives for Course Outcome 3									
	3. Upon successful completion of this course, the student will demonstrate the ability to graph linear and non-linear relationships.	3.1 Create a scatter plot and line of best fit. 3.2 Make a table of values and graph a non-linear relationship. 3.3 Recognize linear and non-linear relationships based on table of values and finite differences, or on equations. 3.4 Apply mathematical modeling to analyze existing information and predict future results using table of values and linear or non-linear graphs.									
	Course Outcome 4	Learning Objectives for Course Outcome 4									
	4. Upon successful completion of this course, the student will demonstrate the ability to find the perimeter of various shapes using combinations of known formulas.	4.1 Use the Pythagorean Theorem to calculate the length of an unknown side in a right triangle, and to solve problems. 4.2 Find the perimeter of simple shapes and composite diagrams using combinations of formulas.									
	Course Outcome 5	Learning Objectives for Course Outcome 5									
	5. Upon successful completion of this course, the student will demonstrate the ability to generate basic statistical data and interpret graphs.	5.1 Implement random and unbiased sampling techniques. 5.2 Calculate mean, median and mode. 5.3 Interpret and create line and bar graphs, and pie charts.									
	Course Outcome 6	Learning Objectives for Course Outcome 6									
	6. Upon successful completion of this course, the student will demonstrate the ability to calculate and express probabilities, and describe results.	6.1 Express the probability of a simple event as a fraction, decimal or percent. 6.2 Interpret probabilities expressed as fractions, decimals or percentages. 6.3 Apply principles of probability to simple experiments.									
Evaluation Process and Grading System:	<table> <tr> <th>Evaluation Type</th><th>Evaluation Weight</th><th>Course Outcome Assessed</th></tr> <tr> <td>Quizzes and Learning Activities</td><td>20%</td><td></td></tr> <tr> <td>Unit Tests</td><td>80%</td><td></td></tr> </table>		Evaluation Type	Evaluation Weight	Course Outcome Assessed	Quizzes and Learning Activities	20%		Unit Tests	80%	
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Quizzes and Learning Activities	20%										
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Date:	August 30, 2018										
	Please refer to the course outline addendum on the Learning Management System for further information.										

