COURSE OUTLINE: MTH 97 - ACE APPRENTICE. MATH

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Course Code: Title	MTH 97: ACE APPRENTICESHIP MATH
Program Number: Name	8220: ACAD CAREER ENTRANCE
Department:	ACAD. UPGRADING SPONSORSHIP
Semesters/Terms:	18F, 19W, 19S
Course Description:	This ACE-credit course is designed to teach or review mathematical knowledge and skills needed for a variety of college programs. Students will solidify skills in geometry, measurement and trigonometry, data collection and analysis. Students will also consolidate skills in analyzing and interpreting both graphical and formulaic models. The course is delivered in self-directed format under the supervision of a professor. It is entirely possible, though not assumed, that the course can be completed in less than one semester.
Total Credits:	5
Hours/Week:	5
Total Hours:	50
Prerequisites:	MTH 94
Corequisites:	There are no co-requisites for this course.
Substitutes:	ACE005
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. EES 7 Analyze, evaluate, and apply relevant information from a variety of sources.
Course Evaluation:	Passing Grade: 70%, B
Books and Required Resources:	Foundations for College Mathematics: MAP4C-B Units 1-4 by Independent Learning Centre

Course Outcomes and Learning Objectives:

Course Outcome 1	**Learning Objectives for Course Outcome 1**
1. Upon successful completion of this course, the student will demonstrate the ability to measure and calculate perimeter, area and volume for two and three dimensional figures.	1.1 Demonstrate an understanding of the relationship between three-dimensional objects and their two-dimensional representatives 1.2 Solve problems involving measurement 1.3 Solve problems involving trigonometry in both right and oblique triangles
Course Outcome 2	**Learning Objectives for Course Outcome 2**
2. Upon successful	2.1 Conduct a survey, including determining appropriate

	completion of this course, the student will demonstrate the ability to collect and evaluate the quality of data, and analyze and interpret the data collected.	sampling technique, and writing clear, unbiased questions 2.2 Assess the validity and reliability of survey results 2.3 Interpret the stated margin of error 2.4 Determine median, mean and mode of data collected 2.5 Describe the importance of the results of the data collected 2.6 Consider properties of normal distribution of data 2.7 Construct scatter plots and line of best fit
	Course Outcome 3	**Learning Objectives for Course Outcome 3**
	3. Upon successful completion of this course, the student will demonstrate the ability to interpret and analyze given graphical and formulaic models.	3.1 Graph a linear function from its equation, interpret the results, and make predictions based on the graph 3.2 Interpret the information as presented on a curved (quadratic or exponential) graph 3.3 Describe the effect of changing the initial conditions or rate of change on a graph 3.4 Solve linear equations and systems of linear equations 3.5 Solve quadratic equations by factoring 3.6 Read and interpret information from various sources such as graphs and charts and communicate the data analysis in a written report

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight	Course Outcome Assessed
Learning Activities	20%	
Unit Tests	80%	

Date: August 30, 2018

Please refer to the course outline addendum on the Learning Management System for further information.