

Master Syllabus

MAT 1460 - Finite Mathematics for Business Analysis

Division: Science, Mathematics and Engineering

Department: Mathematics

Credit Hour Total: 4.0

Lecture Hrs: 4.0

Prerequisite(s): MAT 0200

Other Prerequisite(s): AND Other with a grade of C or better or satisfactory score on math placement test

Date Revised: April 2017

Course Description:

Applications of finite mathematics and functions to business analysis. Functions, financial mathematics, systems, matrices, inequalities, linear programming, sets, permutations and combinations and elementary probability and statistics. Traditional testing (proctored or in Testing Center) is used in all online sections.

General Education Outcomes:

- ▣ Critical Thinking/Problem Solving

Course Outcomes:

Graphs of Polynomial and Trancendental Functions

Demonstrate the ability to graph polynomial, exponential and logarithmic functions.

Assessment Method: Locally developed exams

Performance Criteria: Pass locally developed exams with a score of 70% or better.

Linear, Quadratic, Exponential and Logarithmic Equations

Demonstrate the ability to solve linear, quadratic, exponential and logarithmic equations.

Assessment Method: Locally developed exams

Performance Criteria: Pass locally developed exams with a score of 70% or better.

Matrix Operations

Demonstrate the ability to perform matrix operations.

Assessment Method: Locally developed exams

Performance Criteria: Pass locally developed exams with a score of 70% or better.

Probability

Demonstrate the ability to compute probability of an event.

Assessment Method: Locally developed exams

Performance Criteria: Pass locally developed exams with a score of 70% or better.

Outline:

Functions - Linear, Quadratic, Polynomial, Rational, Exponential, Logarithmic, Piecewise
Mathematics of Finance - Simple and Compound Interest, Future and Present Value
Systems and Matrices - Gauss-Jordan Elimination, Operations, Inverses
Inequalities and Linear Programming - Systems, Geometric Approach to Linear Programming
Sets, Counting, Probability, Measures of Central Tendency