Sinclair Community College
444 E. Third St.
Dayton, OH 45402

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 1365 OR MAT 1370

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

Date Revised: March 2015

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, PiecewiseMathematics of Finance - Simple and Compound Interest, Future and Present ValueSystems and Matrices - Gauss-Jordan Elimination, Operations, InversesInequalities and Linear Programming - Systems, Geometric Approach to Linear Programming Sets, Counting, Probability, Measures of Central Tendency