Contemporary Math (MATH 1332) Online

Credit: 3 semester credit hours (3 hours lecture)

Prerequisite/Co-requisite:

- A score of 350 or above on the TSI-Assessment placement test (effective Fall 2013) or a "C" or better in TMTH 0374.
- Online Orientation and answering "Yes" to seven or more questions on the Distance Education Self-Evaluation: http://www.lit.edu/depts/DistanceEd/OnlineOrientation/OOStep2.aspx

Course Description

Topics may include introductory treatment of sets, logic, number systems, number theory, relations, functions, probability, and statistics. Appropriate applications are included. *This course is time-bound, structured, and online.*

Student Identification Fees

This online course has no additional fees associated with student identification.

Required Textbook and Materials

1. MyMathLab Standalone Access Code
   a. May be purchased online at **www.mymathlab.com**
   b. May be purchased at a local bookstore: **ISBN 032119991X**

2. A basic six-function calculator (+, –, ÷, x, √, %) with a ± key

Course Objectives

Upon completion of this course, the student will be able to:

1. Define sets and apply symbols, terminology, and set operations to solve problems.
2. Define and apply logic symbols and terminology.
3. Understand the development of numeration systems and how to convert from one system to another.
4. Understand and apply the basic topics of number theory.
5. Apply the operations of real numbers to solve numerical and applied problems.
6. Given a relation, define its domain, range, and whether it is a function.
7. Solve simple and compound probability problems.
8. Define and apply mean, median, and mode to solve problems.

Core Objectives

1. Critical Thinking Skills: To include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.
2. Communication Skills: To include effective development, interpretation and expression of ideas through written, oral, and visual communication.
3. Empirical and Quantitative Skills: To include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

Approved: 03/14

MATH 1332 Online
Course Syllabus

Course Outline

A. The Basic Concepts of Set Theory
   1. Symbols and Terminology
   2. Venn Diagrams and Subsets
   3. Set Operations and Cartesian Products
   4. Surveys and Cardinal Numbers

B. Introduction to Logic
   1. Statements and Quantifiers
   2. Truth Tables and Equivalent Statements
   3. The Conditional and Circuits
   4. The Conditional and Related Statements
   5. Analyzing Arguments with Truth Tables

C. Number Theory
   1. Prime and Composite Numbers
   2. Greatest Common Factor and Least Common Multiple

D. Real Numbers and Their Representation
   1. Real Numbers, Order, and Absolute Value
   2. Operations, Properties, and Applications of Real Numbers
   3. Rational Numbers and Decimal Representation
   4. Irrational Numbers and Decimal Representation
   5. Applications of Decimals and Percents

E. The Basic Concepts of Algebra
   1. Ratio, Proportion, and Variation

F. Counting Methods
   1. Using the Fundamental Counting Principle
   3. Using Permutations and Combinations

G. Probability
   1. Basic Concepts
   2. Events Involving "Not" and "Or"
   3. Conditional Probability; Events Involving "And"

H. Statistics
   1. Visual Displays of Data
   2. Measures of Central Tendency

I. Personal Financial Management
   1. The Time Value of Money
   2. Consumer Credit

J. Voting and Apportionment
   1. The Possibilities of Apportionment

Grade Scale

90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
0 – 59	F

Course Evaluation

Final grades will be calculated according to the following criteria:

Tests	60%
Course Assignments	20%
Participation	10%
Final Exam	10%

Course Requirements

1. The student must purchase all required course materials.
2. The student will be expected to have access to the Internet and a computer.
3. The student will logon and access the course a minimum of four times per week.
4. Additional course requirements as defined by the individual course instructor.

Course Policies

1. Cheating of any kind will not be tolerated.
2. Students are responsible for initiating and completing the drop process. Students who stop participating and fail to drop the course will earn an "F" in the course.
3. Additional class policies as defined by the individual course instructor.

Technical Requirements

The latest technical requirements, including hardware, compatible browsers, operating systems, software, Java, etc. can be found online at: http://kb.blackboard.com/pages/viewpage.action?pageId=25368512. A functional broadband internet connection, such as DSL, cable, 3G, 4G, WiMAX, WiFi, satellite, or other broadband access is necessary to maximize the use of the online technology and resources

Disabilities Statement

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office in Student Services, Cecil Beeson Building.