JumpStart Mathematics (TMTH 0132) Online

Credit: 1 semester credit hour (1 hour lecture)

Prerequisite/Co-requisite: Students scoring 343-349 on the TSI-Assessment placement test (effective fall 2013). In addition, completion of the Online Orientation with seven or more questions answered "Yes" on the Distance Education Self-Evaluation: http://www.lit.edu/depts/DistanceEd/OnlineOrientation/OOStep2.aspx

Course Description
Topics in mathematics such as arithmetic operations, basic algebraic concepts and notation, geometry, and real and complex number systems are covered.

This course is a preparatory course for MATH 1332 Contemporary Mathematics. Each student will be working at their own *self-accelerated pace in an online environment* with the understanding that **all** requirements for the course **must** be completed satisfactorily by the end of the scheduled semester.

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

Required Textbook and Materials
1. MyMathLab Standalone Access Code
    a. NOTE: Not necessary if code already purchased for MATH 1332
        i. May be purchased online at **www.mymathlab.com**
        ii. May be purchased at a local bookstore: **ISBN 032119991X**
2. A basic 6-function calculator (+, −, ÷, x, √, %) with a ± key

Course Objectives
Upon completion of this course, the student will be able to:
1. Perform arithmetic operations in the real number system.
2. Solve applied problems using arithmetic operations in the real number system.
3. Apply basic algebraic concepts to simplify expressions.
4. Perform basic operations in the complex number system.

Course Outline
A. Module 1: Whole Numbers
1. Notation, Order, Rounding
2. Applications and Problem Solving
3. Exponential Notation; Order of Operations
4. Factors; Multiples; Divisibility
5. Prime vs. Composite; Prime Factorization
6. Greatest Common Factor and Least Common Multiple
B. Module 2: Fraction Notation
1. Notation and Simplifying
2. Multiplication and Division
3. Order; Addition and Subtraction
4. Mixed Numerals
5. Applications and Problem Solving
6. Order of Operations
7. Simple Probability
C. Module 3: Decimal Notation
1. Notation; Order
2. Rounding
3. Order of Operations

Approved 06/14

4. Fraction Notation; Decimal Notation
5. Applications and Problem Solving
D. Module 4: Percent Notation
   1. Ratio and Proportion
   2. Percent, Decimal, and Fraction Notation
   3. Solving Percent Problems
   4. Applications of Percent
E. Module 5: Statistics - Measures of Central Tendency
F. Module 7: Introduction to Real Numbers and Algebraic Expressions
   1. The Real Numbers
   2. Addition and Subtraction of Real Numbers

3. Applications Involving the Addition and Subtraction of Real Numbers
4. Multiplication and Division of Real Numbers
5. Applications Involving the Multiplication and Division of Real Numbers
6. Order of Operations
7. Introduction to Algebra
8. Properties of Real Numbers
9. Algebraic Expressions
10. Simplifying Algebraic Expressions
G. Module 9: Additional Topics
   1. Complex Numbers
   2. Introduction to Functions
   3. Function Notation

Grade Scale

70 – 100	**Satisfactory**
0 – 69	**Unsatisfactory**

Course Evaluation

Final grades will be calculated according to the following criteria:

Course Assignments	70%
Participation (as defined by instructor)	30%

***Any items that need to be turned in may be
brought to campus or mailed to the instructor.*

Course Requirements

1. The student must purchase all of the required course materials.
2. The student will be expected to have access to the Internet and a computer.
3. Blackboard and MyMathLab logon and access to 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 <u>not</u> be tolerated.
2. Additional class policies as defined by the individual course instructor.

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.

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.

Course Schedule

Course Overview

- This course is a non-semester length/non-course competency based option.
- It may be offered in a variety of formats.
- Each student will be working at their own self-accelerated pace with the understanding that **all** requirements for the course **must** be completed satisfactorily by the end of the scheduled semester time for this course.

Part I: Course Assignments (MyMathLab Assignments)

- You will have a series of online assignments to complete (each module has various parts and each one of these parts has an assignment).
- You must achieve a grade of at least 70% on an assignment before you can move on to the next assignment.
- All assignments must be completed by the due date given by the instructor.

Part II: Participation

- Message-Response and Discussion Board Participation
- Notebook

Contact information varies by instructor.