BASE NCBO (TMTH 0174)

Credit: 1 semester credit hour (1 hour lecture)

Prerequisite/Co-requisite:

- REQUIRED for students scoring a Level 3 ABE or a Level 4 ABE on the TSI-Assessment. This course must be taken concurrently with TMTH 0374.
- RECOMMENDED for students scoring a Level 5 ABE or Level 6 ABE on the TSI-Assessment. If taken, this course must be taken concurrently with TMTH 0374.

Course Description

- Topics in mathematics such as arithmetic operations, basic algebraic concepts and notation, geometry, and real and complex number systems.
- This course must be taken concurrently with TMTH 0374. It will serve to provide additional time for the student to receive one-on-one support. Intervention will be provided by an instructor of record.

Required Textbook and Materials

1. MyLabsPlus Standalone Access Code
    a. A code must be purchased for TMTH 0374. Once the code for TMTH 0374 is purchased no additional code is necessary.
2. A basic 6-function calculator (+, –, ÷, x, √, %) with a ± key

Course Objectives

Upon completion of this course, in conjunction with completion of TMTH 0374, 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. Solve geometric problems.
4. Apply basic algebraic concepts to simplify expressions and solve linear equations and inequalities.
5. Perform basic operations in the complex number system.

Course Outline

A. Module 1
    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
    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

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7. Simple Probability

C. Module 3
1. Notation; Order
2. Rounding
3. Order of Operations
4. Fraction Notation; Decimal Notation
5. Applications and Problem Solving

D. Module 4
1. Ratio and Proportion
2. Percent, Decimal, and Fraction Notation
3. Solving Percent Problems
4. Applications of Percent
5. Simple Interest

E. Module 5
1. Measures of Central Tendency

F. Module 6
1. Perimeter and Area
2. Area of a Shaded Region
3. Applications of Perimeter
4. Applications of Area
5. Circles
6. Applications of Circumference and Area
7. Similar Triangles

G. Module 7
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

H. Module 8
1. Solving One-Step Equations with Addition or Subtraction
2. Solving One-Step Equations with Multiplication or Division
3. Solving Multi-Step Equations
4. Solving More Multi-Step Equations
5. Introduction to Inequalities
6. Solving Inequalities

I. Module 9
1. Complex Numbers
2. Introduction to Functions
3. Function Notation
4. Introduction to Sets

Grade Scale

90-100	**Satisfactory**
0-89	**Unsatisfactory**

Course Evaluation

Final grade will be calculated according to the following criteria:

Daily Grade (consisting of the following):

- Attendance for the entire duration of each class session
  AND
- MyLabsPlus participation for the entire duration of each class session

Course Requirements

1. Attendance is mandatory.
2. The student must purchase all of the required course materials.
3. The student will be expected to have access to the Internet and a computer.
4. Additional course requirements as defined by the individual course instructor.

Course Policies

1. Cheating of any kind will not be tolerated.
2. Students will not receive credit for more than 2 hours per week.
3. Additional class policies as defined by the individual course instructor.

Technical Requirements (for courses using Blackboard)

The latest technical requirements, including hardware, compatible browsers, operating systems, software, Java, etc. can be found online at: https://help.blackboard.com/en-us/Learn/9.1_2014_04/Student/015_Browser_Support/015_Browser_Support_Policy A functional broadband internet connection, such as DSL, cable, or WiFi 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. You may also visit the online resource at http://www.lit.edu/depts/stuserv/special/defaults.aspx

Student Code of Conduct Statement

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at www.lit.edu or obtained in print upon request at the Student Services Office. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

Course Schedule

- This course must be taken concurrently with TMTH 0374 and will serve to provide additional time for the student to receive one-on-one support. Intervention will be provided by an instructor of record.

Contact information varies by instructor.