

Base NCBO (TMTH 0165)



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 0365.
- 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 0365.

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 TMTH0365 Beginning Algebra. 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 0365. Once the code for TMTH 0365 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 0365, the student will be able to:

1. Define, represent, and perform operations on real numbers.
2. Identify and solve linear, absolute value, and quadratic equations.
3. Identify and solve absolute value and linear inequalities.
4. Recognize and use algebraic properties, concepts, and procedures (including factoring) to combine, transform, and evaluate polynomial expressions.
5. Graph linear equations.

Course Outline

A. Review Module

1. Factors, Multiples, Divisibility
2. Prime vs. Composite/ Prime Factorization
3. Greatest Common Factor and Least Common Multiple

B. Module 1

1. The Real Numbers
2. Addition and Subtraction of Real Number
3. Applications Involving the Addition and Subtraction of Real Numbers

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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
- C. Module 2
 1. Solving One-Step Equations with Addition or Subtraction
 2. Solving One-Step Equations with Multiplication and Division
 3. Solving Multi-Step Equations
 4. Solving More Multi-Step Equations
 5. Solving Absolute Value Equations
 6. Solving More Absolute Value Equations
 7. Introduction to Inequalities
 8. Solving Inequalities
 9. Solving Absolute Value Inequalities
 10. Applications
- D. Module 3
 1. Exponents
 2. Rules of Exponents
 3. Scientific Notation
 4. Introduction to Polynomials
 5. Evaluating Polynomials
 6. Addition of Polynomials
 7. Subtraction of Polynomials
 8. Multiplication of Polynomials
 9. More Multiplication of Polynomials
 10. Division of Polynomials by Monomials
 11. Division of Polynomials by Binomials
- E. Module 4
 1. Factoring and the Greatest Common Factor
 2. Factoring by Grouping
 3. Factoring Trinomials
 4. Factoring More Trinomials
 5. Factoring Binomials
 6. Factoring: A General Strategy
 7. Solving Quadratic Equations by Factoring
 8. Applications
- F. Let's Graph!
 1. Graphing Linear Equations
 2. Graphing Systems of Equations
 3. Solving Systems of Equations with Substitution
 4. Solving Systems of Equations with Elimination
 5. Applications

Grade Scale

90-100

0-89

Satisfactory

Unsatisfactory

Course Evaluation

Final grade will be calculated according to the following criteria:

Daily Grade consisting of the following: 100%

- 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.

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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-](https://help.blackboard.com/en-us/Learn/9.1)

[us/Learn/9.1](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 class must be taken concurrently with TMTH 0365 and will provide additional time for the student to receive one-on-one support.

Contact information varies by instructor.