

Developmental Mathematics (TMTH 0374-3B1)



**LAMAR INSTITUTE
OF TECHNOLOGY**

INSTRUCTOR CONTACT INFORMATION

Instructor: Daniel Dove
Email: dadove@lit.edu
Office Phone: 409-247-5017
Office Location: TC 112A
Office Hours: M 8:00 am – 9:30 am, 11:00 am – 1:30 pm
T 8:00 am – 11:00 pm, 12:30 pm – 1:30 pm
W 12:00 pm – 1:30 pm
R 8:00 am - 11:00 am
F 8:00 am-12:30 pm

CREDIT

3 Semester Credit Hours (3 hours lecture, 0 hours lab)

MODE OF INSTRUCTION

Face-To-Face

PREREQUISITE/CO-REQUISITE:

Must be co-enrolled in TMTH 0174 BASE NCBO (Mathematics)

COURSE DESCRIPTION

The course supports students in developing skills, strategies, and reasoning needed to succeed in mathematics, including communication and appropriate use of technology. Topics include the study of numeracy and the real number system; algebraic concepts, notation, and reasoning, quantitative relationships; mathematical models; and problem solving.

COURSE OBJECTIVES

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

1. Use appropriate symbolic notation and vocabulary to communicate, interpret, and explain mathematical concepts.
2. Define, represent, and perform operations on real numbers, applying numeric reasoning to investigate and describe quantitative relationships and solve real world problems in a variety of contexts.
3. Use algebraic reasoning to solve problems that require ratios, rates, percentages, and

Approved: **Initials/date**

proportions in a variety of contexts using multiple representations.

4. Apply algebraic reasoning to manipulate expressions and equations to solve real world problems.

5. Use graphs, tables, and technology to analyze, interpret, and compare data sets.

6. Construct and use mathematics models in verbal, algebraic, graphical and tabular form to solve problems in a variety of contexts and to make predictions and decisions.

REQUIRED TEXTBOOK AND MATERIALS

1. A Pearson MyMathLab Standalone Access Code

a. Once a student has access to this class in Blackboard, they will be able to access the Pearson website and purchase a code online directly from Pearson.

OR

b. May be purchased at a local bookstore:

i. 18 Week Standalone Access Card: 9780135910269

ii. 24 Month Standalone Access Card: 9780135189962

2. You will need at least a basic 6 function calculator, but I will not penalize you for more advanced calculators.

ATTENDANCE POLICY

Attendance is mandatory and will count as an exam grade. The grade will be determined by number of days attended compared to total class days. Two “free” absences are allowed before this policy takes effect to help in earning a 100. I also reserve the right to allow an extra day(s) for documented extenuating circumstances. Also, all exams will be in person on days listed in the course schedule. If you must miss an exam day, you need to contact me in advance of the test to make alternate arrangements.

DROP POLICY

If you wish to drop a course you are eligible to drop, you are responsible for initiating and completing the drop process by the specified drop date as listed on the [Academic Calendar](#). If you stop coming to class and fail to drop the course, you will earn a “DF” in the course.

STUDENT EXPECTED TIME REQUIREMENT

For every hour in class (or unit of credit), students should expect to spend at least two to three hours per week studying and completing assignments. For a 3-credit-hour class, students should prepare to allocate approximately six to nine hours per week outside of class in a 16-week session OR approximately twelve to eighteen hours in an 8-week session. Online/Hybrid students should expect to spend at least as much time in this course as in the traditional, face-to-face class.

Course Outline

A. Module 1- Whole Numbers

1. Notation, Order, Rounding
2. Applications and Problem Solving
3. Exponential Notation; Order of Operations
4. Factors vs. Multiples
5. Prime vs. Composite; Prime Factorization
6. Greatest Common Factor and Least Common Multiple

B. Module 2- Fraction Notation

1. Fraction 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. Decimal Notation; Order
2. Rounding
3. Order of Operations
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
5. Simple Interest

E. Module 5-Data, Graphs and Statistics

1. Measures of Central Tendency
2. Interpreting Data from Tables and Graphs
3. Interpreting and Drawing Bar Graphs and Line Graphs
4. Interpreting and Drawing Circle Graphs

F. Module 7-Introductions to Real Numbers and Algebraic Expressions

1. The Real Numbers
2. Addition and Subtraction of Real Numbers
3. Applications Involving Addition and Subtraction of Real Numbers
4. Multiplication and Division of Real Numbers
5. Applications Involving 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 8-Solving Equations

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. Applications

COURSE CALENDAR

What is Due	Location	Due Date
All Module 1 Assignments	MyMathLab	Sunday, January 28
Module 1 Test	MyMathLab	Monday, January 29
All Module 2 Assignments	MyMathLab	Sunday, February 11
Module 2 Test	MyMathLab	Monday, February 12
All Module 3 Assignments	MyMathLab	Sunday, February 25
Module 3 Test	MyMathLab	Monday, February 26
All Module 4 Assignments	MyMathLab	Sunday, March 17
Module 4 Test	MyMathLab	Monday, March 18
All Module 5 Assignments	MyMathLab	Sunday, March 31
Module 5 Test	MyMathLab	Monday, April 1
All Module 7 Assignments	MyMathLab	Sunday, April 14
Module 7 Test	MyMathLab	Monday, April 15
All Module 8 Assignments	MyMathLab	Sunday, April 28
Module 8 Test	MyMathLab	Wednesday, May 1

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

Tests 60%

Course Assignments 40%

GRADE SCALE

- 90-100 DA
- 80-89 DB
- 70-79 DC
- 0-69 DF

LIT does not use +/- grading scales

ACADEMIC DISHONESTY

Students found to be committing academic dishonesty (cheating, plagiarism, or collusion) may receive disciplinary action. Students need to familiarize themselves with the institution's Academic Dishonesty Policy available in the Student Catalog & Handbook at <http://catalog.lit.edu/content.php?catoid=3&navoid=80#academic-dishonesty>.

TECHNICAL REQUIREMENTS

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at <https://lit.edu/online-learning/online-learning-minimum-computer-requirements>. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at [Special Populations - Lamar Institute of Technology \(lit.edu\)](http://SpecialPopulations-LamarInstituteofTechnology.lit.edu).

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. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

STARFISH

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

ADDITIONAL COURSE POLICIES/INFORMATION

- **Late Work**
 - **I may apply up to a 20% penalty on any homework assignments turned in after the due date.**
 - **There are NO late exams or retakes. If you miss an exam without prior arrangements with the professor, you will earn a zero on the missed exam! Remember, exams are face-to-face during class time.**
- **At least one weekly announcement will be sent by the instructor regarding upcoming due dates and exams each week, with possibly more. Be sure to check Blackboard and your LIT email three or more times per week to keep up with Course Announcements!**
- **I will do my best to respond to all communication within 24 hours except on weekends and holidays.**