

Developmental Mathematics (TMTH 0374 – 3B1)

BASE NCBO (TMTH 0174 – 3B1)



**LAMAR INSTITUTE
OF TECHNOLOGY**

CREDIT

TMTH 0374

3 Semester Credit Hours (3 hours lecture)

TMTH 0174

1 Semester Credit Hours (1 hour 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 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.

Approved: **Initials/date**

INSTRUCTOR CONTACT INFORMATION

Instructor: Bradd Henry

Email: brhenry@lit.edu

Office Phone: 409 247 4924

Office Location: Technology Center room 236

Office Hours: Monday 10:00-11:00 , 1:20-1:50 , 4:30-5:30

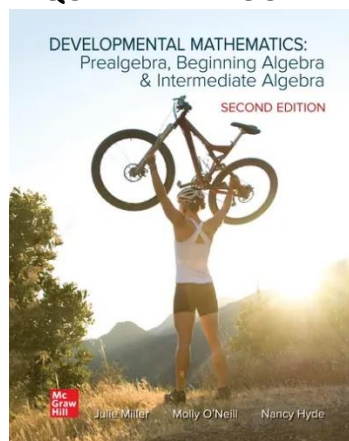
Tuesday 10:00-11:00 , 4:30-5:30

Wednesday 10:00-11:00 , 12:30-1:00 , 1:30-1:50

Thursday 10:00-11:00 , 12:15-12:45 , 4:30-5:30

Friday 10:30-12:00

REQUIRED TEXTBOOK AND MATERIALS



ALEKS Developmental Mathematics. *Physical textbook not required.*

*Online **subscription to ALEKS is required** and comes with eBook. This is included in the ELE bundle, or you may purchase subscriptions directly from ALEKS.*

If opted out Aleks subscriptions vary, 6-month \$99.95

Materials:

Approved recommended calculators by individual course instructor.

ATTENDANCE POLICY

Attendance is required, online students should login and work on assignments 2-3 times per week, minimum.

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process by the specified date as listed in the College Calendar on the [Student Success](#) web page. If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

COURSE CALENDAR

Assignment Schedule (subject to change with or without notice)

Week of	Homework Assignments	ALEKS
week 1	Course syllabus and class orientation	
week 1	Section 1.1: Introduction to Whole Numbers	
week 1	Section 1.2: Addition and Subtraction of Whole Numbers and Perimeter	
week 1	Section 1.3: Rounding and estimating	
week 1	Section 1.4: Multiplication of Whole Numbers and Area	
week 2	Section 1.5: Division of Whole Numbers	
week 2	Section 1.6: Exponents, Algebraic Expressions, and the Order of Operations.	
week 2	Section 1.7: Mixed Applications and Computing Mean	
week 3	Section 2.1: Integers, Absolute Value, and Opposite	
week 3	Section 2.2: Addition of Integers	
week 3	Section 2.3: Subtraction of Integers	
week 4	Section 2.4: Multiplication and Division of Integers	
week 4	Section 2.5: Order of Operations and Algebraic Expressions	
week 4	review and TEST 1 sections 1.1 – 2.5	
week 5	Section 3.1: Simplifying Expressions and Combining Like Terms	
week 5	Section 3.2: Addition and Subtraction Properties of Equality	
week 5	Section 3.3: Multiplication and Division Properties of Equality	
week 5	Section 3.4: Solving Equations with Multiple Steps	
week 6	Section 3.5: Applications and Problem Solving	
week 6	Section 4.1: Introduction to Fractions and Mixed Numbers	
week 6	Section 4.2: Simplifying Fractions	
week 7	Section 4.3: Multiplication and Division of Fractions	
week 7	Section 4.4: Least Common Multiple and Equivalent Fractions	
week 7	Section 4.5: Addition and Subtraction of Fractions	
week 8	Section 4.6: Estimation and Operations on Mixed Numbers	
week 8	Section 4.7: Order of Operations	
week 8	Section 4.8: Solving Equations Containing Fractions	
week 9	review and TEST 2 sections 3.1 – 4.8	
week 10	Section 5.1: Decimal Notation and Rounding	
week 10	Section 5.5: Fractions, Decimals and the Order of Operations	
week 10	Section 5.6: Solving Equations Containing Decimals	
week 11	Section 6.1: Ratio	
week 11	Section 6.2: Rates and Unit cost	
week 11	Section 6.3: Proportions	
week 11	Section 6.4: Applications of Proportions and Similar Figures	
week 12	review and Test 3 sections 5.1 – 6.4	

week 13	Section 7.1: Percents, Fractions and Decimals	
week 13	Section 7.2: Percent Proportion and Applications	
week 13	Section 7.3: Percent Equations and Applications	
week 13	Section 7.4: Applications of Sales Tax, Commission, Discount, Markup and percent Increase and Decrease.	
week 13	Section 7.5: Simple Interest	
week 14	Section 9.1: Tables, Bar Graphs, Pictographs and Line Graphs	
week 14	Section 9.2: Frequency Distributions and Histograms	
week 14	Section 9.3: Circle Graph	
week 14	Section 9.4: Introduction to Probability	
week 14	Section 9.5: Mean, Median and Mode	
week 15	review and Test 4 sections 7.1 – 9.5	
week 15	review for Final Exam	
week 16	Final Exam	

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

Final grade will be calculated according to the following criteria:

Test	60%
Course Assignments	40%

GRADE SCALE

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

COURSE EVALUATION FOR TMTH 0174

Final grades will be calculated according to the following criteria:

- Final grades will be calculated according to the following criteria:
 - If a final class grade of DA, DB, or DC is earned in TMTH 0374, then a grade of S (Satisfactory) will be earned in TMTH 0174.
 - If a final class grade of DF is earned in TMTH 0374, then a grade of U (Unsatisfactory) will be earned in TMTH 0174

GRADE SCALE

- 70-100 S
- 0-69 U

TECHNICAL REQUIREMENTS

For the latest technical requirements, including hardware, compatible browsers, operating systems, etc., review the Minimum Computer and Equipment Requirements on the [LIT Online Experience](#) page. 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 \(lit.edu\)](#).

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.

ARTIFICIAL INTELLIGENCE STATEMENT

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare students for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI/ChatGPT in their courses.

Math Ai Policy

- No Ai tools, apps, software, etc. are to be used on any work that is to be scored, graded, assessed, etc. This includes all homework, exams, tests, projects, assessments, quizzes, discussions, etc.
- Failure to follow these guidelines (as deemed by the instructor) may be considered academic dishonesty and will be managed by instructor discretion.

Math Testing Policy

- All online Math courses will use Respondus Lockdown Browser and Monitor. This means that students will be recorded when taking exams and will need a webcam and microphone.
- If a student is suspected of cheating, such as with Ai use or other cheating methods, the student will be given a zero on the exam. The student will have one week of being notified to have a meeting with the instructor either face to face in the instructor's office or through an online method such as Microsoft Teams or Zoom. During this meeting, the student may be asked to work out problems or even the entire test in front of the instructor to adjust the student's grade.
- If the student is caught using Ai or the student fails to meet with the instructor within one week of notification or the student is unable to complete the work on the exam to the instructor present, a zero will be given for that exam or assignment, and there will be no opportunity for a redo.

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

1. A final grade of incomplete will only be given if a student is passing the course and is missing only one major assignment. Such an arrangement must be made with the instructor. An incomplete assignment must be finished during the next long semester or a grade of "I" will become "F".
2. No food or drinks in the classroom.
3. Telephones must be turned off during class time.
4. Phone calculators are **NOT** allowed to be used during tests.
5. Tests will be taken in class, on paper or on classroom desktop computers (not laptop computers).