

Intermediate Algebra (TMTH 0375 – 3B1)

BASE NCBO (TMTH 0165 – 3B1)

CREDIT

TMTH 0375

3 Semester Credit Hours (3 hours lecture)

TMTH 0165

1 Semester Credit Hours (1 hour lab)



**LAMAR INSTITUTE
OF TECHNOLOGY**

MODE OF INSTRUCTION In person, face to face.

PREREQUISITE/CO-REQUISITE:

Must be co-enrolled in TMTH 0165 BASE NCBO (Algebra).

COURSE DESCRIPTION

A study of relations and functions, inequalities, algebraic expressions and equations (absolute value, polynomial, radical, rational), with a special emphasis on linear and quadratic expressions and equations.

COURSE OBJECTIVES

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

1. Define, represent, and perform operations on real and complex numbers.
2. Recognize, understand, and analyze features of a function.
3. Recognize and use algebraic (field) properties, concepts, procedures (including factoring), and algorithms to combine, transform, and evaluate absolute value, polynomial, radical, and rational expressions.
4. Identify and solve absolute value, polynomial, radical, and rational equations.
5. Identify and solve absolute value and linear inequalities.
6. Model, interpret, and justify mathematical ideas and concepts using multiple representations.
7. Connect and use multiple strands of mathematics in situations and problems, as well as in the study of other disciplines.

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

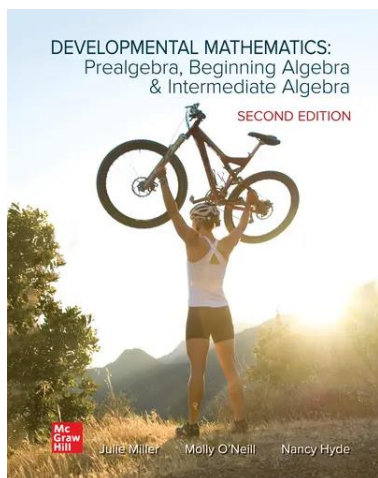
Tuesday 10:00-11:00 , 4:30-5:30

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:

A basic scientific calculator.

A binder, notebook paper, a folder, pencils, and erasers. Optional: highlighters

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 – Subject to Change.

Week	TOPIC	ASSIGNMENTS (Due on this Date)
Week 1	Course introduction 10.1 Addition, Subtraction, Multiplication, and Division Properties	
Week 2	10.2 Solving Linear Equations 10.3 Linear Equations: Fractions and Decimals 10.4 Applications of Linear Equations 10.8 Linear Inequalities	
Week 3	13.1 Multiplying and Dividing Expressions w/Common Bases 13.2 More Properties of Exponents	
Week 4	13.3 Definitions of b^0 and b^{-n} 13.5 Addition and Subtraction of Polynomials 13.6 Multiplication of Polynomials (Special Products) 13.7 Division of Polynomials	
Week 5	review for Test 1 Test 1	

Week 6	14.1 Greatest Common Factor, Factor by Grouping 14.2 Factoring Trinomials of the Form $x^2 + bx + c$ 14.4 Factoring Trinomials AC Method 14.5 Difference of Squares and Perfect Square Trinomials	
Week 7	15.1 Rational Expressions 15.3 Least Common Denominator 15.4 Addition and Subtraction of Rational Expressions	
Week 8	review for Test 2 Test 2	
Week 9	15.5 Complex Fractions 15.6 Rational Equations 16.1 Introduction to Relations 16.2 Introduction to Function	
Week 10	16.3 Graphs of Functions 17.1 Compound Inequalities 17.3 Absolute Value Equations 17.4 Absolute Value Inequalities	
Week 11	review for Test 3 Test 3	
Week 12	18.2 Rational Exponents 18.3 Simplifying Radical Expressions 18.4 Addition and Subtraction of Radicals 18.5 Multiplication of Radicals	
Week 13	18.6 Division of Radicals and Rationalization 18.7 Solving Radical Equations 18.8 Complex Numbers	
Week 14	19.1 Square Root Property and Completing the Square 19.2 Quadratic Formula	
Week 15	review for test 4 Test 4 review for Final Exam	
Week 16	Final Exam	

COURSE EVALUATION FOR TMTH 0375

Final grades will be calculated according to the following criteria:

- Test 60%
- Assignments 40%

GRADE SCALE

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

COURSE EVALUATION FOR TMTH 0165

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 0375, then a grade of S (Satisfactory) will be earned in TMTH 0165.
 - If a final class grade of DF is earned in TMTH 0375, then a grade of U (Unsatisfactory) will be earned in TMTH 0165

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).