



**LAMAR INSTITUTE  
OF TECHNOLOGY**

## Intermediate Algebra (TMTH 0375)

### BASE NCBO (TMTH 0165)

#### **CREDIT**

TMTH 0375

3 Semester Credit Hours (3 hours lecture)

TMTH 0165

1 Semester Credit Hours (1 hour lab)

#### **MODE OF INSTRUCTION**

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: Guy Harwell

Email: gharwell@lit.edu

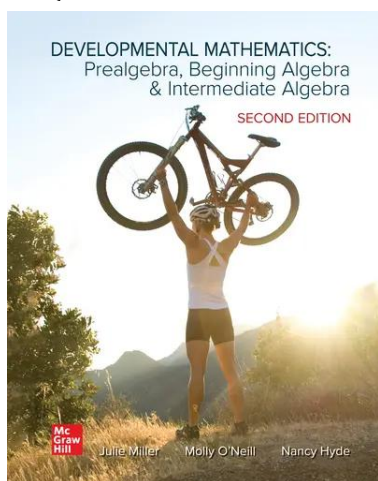
Office Phone: (409) 247-4757

Office Location: Building T5, Room 103

Office Hours: By appointment

- My office hours are available on Starfish.
- To schedule an appointment please use Starfish.

## 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)

| <i>Week Of:</i> | <i>Sec</i> | <i>Topic</i>                                                                                                                                    | <i>Homework due:</i>                                              |
|-----------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 08/23           |            | <b>Course introduction</b><br>10.1 Addition, Subtraction, Multiplication, and Division Properties<br><b>Setup Quiz</b>                          | Homework for section 10.1 due on 08/29<br>Setup Quiz due on 08/29 |
| 08/30           |            | 10.2 Solving Linear Equations<br>10.3 Linear Equations: Fractions and Decimals<br>10.4 Applications of Linear Equations                         | Homework for sections 10.2, 10.3, 10.4 due on 09/05               |
| 09/06           |            | 10.8 Linear Inequalities<br>13.1 Multiplying and Dividing Expressions w/Common Bases<br>13.2 More Properties of Exponents                       | Homework for sections 10.8, 13.1, 13.2 due on 09/12               |
| 09/13           |            | 13.3 Definitions of $b^0$ and $b^{-n}$<br>13.5 Addition and Subtraction of Polynomials<br>13.6 Multiplication of Polynomials (Special Products) | Homework for sections 13.3, 13.5, 13.6 due on 09/19               |
| 09/20           |            | 13.7 Division of Polynomials<br><b>Exam 01 (Sections 10.1 – 10.4, 10.8, 13.1 – 13.3, 13.5, 13.6)</b>                                            | Homework for section 13.7 due on 09/26                            |
| 09/27           |            | 14.1 Greatest Common Factor, Factor by Grouping<br>14.2 Factoring Trinomials of the Form $x^2 + bx + c$<br>14.4 Factoring Trinomials AC Method  | Homework for sections 14.1, 14.2, 14.4 due on 10/03               |
| 10/04           |            | 14.5 Difference of Squares and Perfect Square Trinomials<br>15.1 Rational Expressions<br>15.3 Least Common Denominator                          | Homework for sections 14.5, 15.1, 15.3 due on 10/10               |
| 10/11           |            | 15.4 Addition and Subtraction of Rational Expressions<br>15.5 Complex Fractions<br>15.6 Rational Equations                                      | Homework for sections 15.4, 15.5, 15.6 due on 10/17               |
| 10/18           |            | 16.1 Introduction to Relations<br><b>Exam 02 (Sections 13.7, 14.1, 14.2, 14.4, 14.5, 15.1, 15.3 – 15.6)</b>                                     | Homework for sections 16.1 due on 10/24                           |
| 10/25           |            | 16.2 Introduction to Functions<br>16.3 Graphs of Functions<br>17.1 Compound Inequalities                                                        | Homework for section 16.2, 16.3, 17.1 due on 10/31                |
| 11/01           |            | 17.3 Absolute Value Equations<br>17.4 Absolute Value Inequalities<br>18.2 Rational Exponents                                                    | Homework for sections 17.3, 17.4, 18.2 due on 11/07               |
| 11/08           |            | 18.3 Simplifying Radical Expressions<br>18.4 Addition and Subtraction of Radicals<br>18.5 Multiplication of Radicals                            | Homework for sections 18.3, 18.4, 18.5 due on 11/14               |
| 11/15           |            | 18.6 Division of Radicals and Rationalization<br><b>Exam 03 (Sections 16.1, 16.2, 16.3, 17.1, 17.3, 17.4, 18.2 – 18.5)</b>                      | Homework for sections 18.6 due on 11/21                           |
| 11/22           |            | 18.7 Solving Radical Equations<br>18.8 Complex Numbers<br>19.1 Square Root Property and Completing the Square                                   | Homework for section 18.7, 18.8, 19.1 due on 11/28                |

|       |                                              |                                           |
|-------|----------------------------------------------|-------------------------------------------|
| 11/29 | 19.2 Quadratic Formula<br>Final Review       | Homework for section 19.2 due on<br>12/05 |
| 12/06 | <b>Final/Core Assessment (Comprehensive)</b> | <b>Final Exam on 12/01</b>                |

### COURSE EVALUATION FOR TMTH 0375

Final grades will be calculated according to the following criteria:

- **Test** **60%**
- **Final Exam** **20%**
- **Assignments** **20%**

### 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](mailto:specialpopulations@lit.edu). You may also visit the online resource at [Special Populations - Lamar Institute of Technology \(lit.edu\)](https://www.lit.edu/special-populations).

### **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](http://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.

### **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**

## Math AI Policy

- **No AI tools, apps, software, etc. are to be used on any work that is 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 or for exams, the Math testing policy.

## Math Testing Policy

All online Math courses will use Respondus Lockdown Browser and Monitor **(does not apply to face-to-face classes)**. **This means 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 through such means 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 instructor within one week of notification or the student is unable to complete the work on the exam with instructor present, a zero will be given for that exam or assignment, and there will be no opportunity for a redo.

## Attendance

### Information

- Attendance for face-to-face courses will be taken at every class meeting.
- The method can vary and can include:
  - Roll call
  - Sign in sheet
    - Please only sign in for yourself and no one else. If you do sign for someone else, it is considered academic dishonesty (see Student Handbook).
  - Instructor verification

### Tardy

- You are considered tardy if you come in after attendance is taken.
- It is your responsibility to make sure that you are counted as present in the class.
  - If you are tardy, it is your responsibility to make sure that you talk with the instructor after class.
  - If you are tardy and you are not counted present, you will be counted absent for that class day.

- This is to say that you only have that class session to let me know you are tardy, otherwise you are counted as absent.
- If you come to class and leave you will be counted as absent.
- If you come to class and leave for an extended period (as deemed by the instructor) and then come back to class, you will be counted as absent.
- Three tardies will count as an absence.

#### *Remarks*

- If you have any questions about attendance or issues you should contact me.
- **If you stop attending class (or are thinking of stopping) you should come and talk with me first so we can discuss any options that might be available for you.**

#### *Assignments*

##### *Homework Assignments*

- Homework assignments are assigned for every topic that we cover in the course.
- Homework is not optional and must be completed by their respective due dates.
- Failure to complete the homework assignment by its due date will result in a loss of points.
- We will be using ALEKS for our homework for the course.

##### *Homework Assignment Due Dates*

- To find the due dates for the homework assignments please refer to ALEKS.

##### *Other Assignments*

- We can have other assignments during our course.
- Other assignments can include activities such as projects, worksheets, papers, etc.
- They will be announced via our online course website (Blackboard) and/ or by the instructor in class (if applicable).
- Please see our online course website (Blackboard) and/ or the instructor.

#### *Class Etiquette*

##### *Information*

- Please be respectful of the other people and me in class.
- If you have any questions or concerns about the class, please come and talk with me outside of class (I am always concerned with how you are doing in the class).

##### *Remarks*

- Please remember that mathematics can be a difficult subject and I am here to help you, but we need to be respectful of everyone (including me) and address concerns outside of class.
- If I ask to meet with you (by video conference for online courses), please be respectful and meet with me.

## Communication

### Information

- The best way to reach me is by email ([gharwell@lit.edu](mailto:gharwell@lit.edu)) or my office hours (see Starfish).
  - For email, please allow 24 – 48 hours
  - Emails at or after 5:00 pm on Friday might not be answered before the following Monday.
  - When emailing me please use your college email address and put the class subject and section in the subject line.
    - Example class subject and section: MATH 1314.2A4
- Please check our online class website (Blackboard) daily for announcements.
- Any announcements about the class will be on our online class website (Blackboard).

### Communication Etiquette

Make sure that all communications are polite and respectful. Please use professional communication etiquette. Remember, email is formal written communication and should be treated as such.