



**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

Online

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

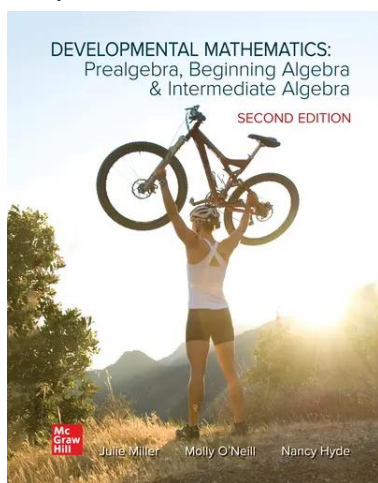
Office Phone: (409) 247-4757

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		Course introduction 10.1 Addition, Subtraction, Multiplication, and Division Properties Setup Quiz	Homework for section 10.1 due on 08/29 Setup Quiz due on 08/29
08/30		10.2 Solving Linear Equations 10.3 Linear Equations: Fractions and Decimals 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 13.1 Multiplying and Dividing Expressions w/Common Bases 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} 13.5 Addition and Subtraction of Polynomials 13.6 Multiplication of Polynomials (Special Products) Quiz 01 (Review quiz. Any topics covered on exam 01 can be on it)	Homework for sections 13.3, 13.5, 13.6 due on 09/19
09/20		13.7 Division of Polynomials Exam 01 (Sections 10.1 – 10.4, 10.8, 13.1 – 13.3, 13.5, 13.6)	Homework for section 13.7 due on 09/26
09/27		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	Homework for sections 14.1, 14.2, 14.4 due on 10/03
10/04		14.5 Difference of Squares and Perfect Square Trinomials 15.1 Rational Expressions 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 15.5 Complex Fractions 15.6 Rational Equations Quiz 02 (Review quiz. Any topics covered on exam 2 can be on it)	Homework for sections 15.4, 15.5, 15.6 due on 10/17
10/18		16.1 Introduction to Relations Exam 02 (Sections 13.7, 14.1, 14.2, 14.4, 14.5, 15.1, 15.3 – 15.6)	Homework for sections 16.1 due on 10/24
10/25		16.2 Introduction to Functions 16.3 Graphs of Functions 17.1 Compound Inequalities	Homework for section 16.2, 16.3, 17.1 due on 10/31
11/01		17.3 Absolute Value Equations 17.4 Absolute Value Inequalities 18.2 Rational Exponents	Homework for sections 17.3, 17.4, 18.2 due on 11/07
11/08		18.3 Simplifying Radical Expressions 18.4 Addition and Subtraction of Radicals 18.5 Multiplication of Radicals Quiz 03 (Review quiz. Any topics covered on exam 3 can be on it)	Homework for sections 18.3, 18.4, 18.5 due on 11/14

11/15	18.6 Division of Radicals and Rationalization Exam 03 (Sections 16.1, 16.2, 16.3, 17.1, 17.3, 17.4, 18.2 – 18.5)	Homework for sections 18.6 due on 11/21
11/22	18.7 Solving Radical Equations 18.8 Complex Numbers 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 Final Review	Homework for section 19.2 due on 12/05
12/06	Final/Core Assessment (Comprehensive)	Final Exam on 12/01

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. 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.

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

Attendance

Online Courses

Information

- **You must complete the following before the census date to show that you are actively engaged in the course during the first week:**
 - **Setup Quiz**
- Note that attendance is not “taken” as in a face-to-face class, but you will need to actively participate in the course each week.
- Active participation includes things such as completing discussions, completing quizzes, completing exams, other course activities for that week.
 - Note that just logging into the course is **not** considered active participation.

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).

Online Courses

- Please do not take pictures, video recordings, snapshots, etc. of the exams/ quizzes.
- If you have a question about a problem, please email me and let me know which exam/ quiz, which problem and your question.

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) 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.

Electronic Devices

Information

Online Courses

- Electronic devices include laptops, iPads, all phones, tablets, headphones, etc.
- For online courses electronic devices are not allowed on exams/ quizzes.

Calculators

- No calculators on phones, laptops, tablets, etc. are to be used in the class at all.
- Only approved calculators are allowed on exams/ quizzes.
 - Approved calculators are TI-83 series, TI-84 series, scientific, and four-function calculators.
- For Online: You should show the webcam your calculator before taking the exam/ quiz and make sure that it can be seen by the webcam during the entire exam.
- Failure to adhere to the policy can result in a loss of points.
- If you have any questions, you should contact me before the exam/ quiz.

Exams/ Final Exam

Online Courses

Information

- We will be having several major exams and a cumulative final exam (this means that the final exam is over everything in the course).
- You can find our exam schedule on the course calendar (see syllabus).
- Note that the exam/quiz will have an open date and a due date that you can find on our course calendar and/or course website (Blackboard) by going to the respective exam or quiz.
- You will have a limited amount of time to start the exam/ quiz.
 - The time the exam/quiz will be open can be 1 to 7 days depending on the semester, class, etc.
- You can find this on our course calendar and/or course site (Blackboard) by going to the respective exam or quiz.
- Once the due date has passed the exam/quiz will no longer be available to take and it will not reopen.
 - If you miss an exam/quiz you should contact me immediately.
- You will be expected to complete the exam/quiz in a single sitting.
 - That is to say that once you start the exam/quiz you must finish in a single session.
- You won't be able to take the exam/ quiz again if you leave the exam/ quiz after starting it.
 - If you start it and **exit it for any reason** (including technical reasons) every question you did not complete will be marked wrong and you will lose points.
 - You should contact me as soon as possible if this happens.
 - Note this does not mean that I will automatically reopen the exam/ quiz as you will be expected to have all the technical issues worked out before ever taking the exam/ quiz.
- Our exams/ quizzes will be taken online using our online class site (Blackboard).

- This is to say that you can find them on our online class site (Blackboard).
- Please see the instructions on our class website (Blackboard).

Acceptable and Unacceptable Items on Exams/ Quizzes

- Acceptable Items
 - Printed out exam template.
 - Calculator: TI-83 series, TI-84 series, scientific, four-function
- Unacceptable Items
 - No electronic (phones, electronic watches, iPads, tablets, headphones, etc.) are allowed on exams/ quizzes.
 - No loose-leaf paper or notebooks.

Calculators on Online Exams

- Approved calculators (TI-83 series TI-84 series, scientific, four-function) are allowed and must be shown to the webcam at the beginning and end of the exam/ quiz.
- The calculator must be visible on the webcam for the entire exam/ quiz.

Respondus Browser and Webcam

- You will be required to use the Respondus Browser.
 - The Respondus Browser must be set up correctly before taking the exam/ quiz.
 - You can find detailed steps on how to do this on our online course website (Blackboard).
 - Please see our class website (Blackboard) for more information as you will be expected to have this correctly set-up before taking any exam/ quiz
 - **!!!! Failure to have the Respondus Browser correctly set up before the exam will result in a zero for the exam!!!!**
- The exam will not open unless the Respondus Browser has been correctly set-up before you take the exam and you may not even see the exam on our class site (Blackboard) at all if you do not have it set-up.
- We will have a Practice Exam on our course site (Blackboard) to make sure we have the Respondus Browser set up correctly.
- Note that you should set up the Respondus Browser on the computer that you will be taking your exams on.
 - This should be a desktop or laptop, no iPads, phones, or tablets are allowed.
- The browser should be one of the following: MS Edge, Chrome, or Firefox.
- Mac and Apple computers can have issues and should not be used. Please contact me ASAP.

Remarks

- The best scenario is a windows desktop or laptop the Edge, Chrome, or Firefox browser. Otherwise, there could be issues, and this could lead to a delay in taking the exams/ quizzes and can lead to a loss of points.

- If you do have issues, please contact me as soon as possible and we can get IT involved to help.

Written Work for Exams

Information

- For all exams you will need to show your fully written solution to each problem.
- You will need to write your fully written solutions to the problems on paper, scan the written work to a single pdf file, and upload this single pdf file to our course website (Blackboard).
- Instructions on this process (what to do) can be found on our course website (Blackboard).
- You will have up to 15 minutes after you submit your exam to scan your written work into a single pdf file and upload this file to our course website (Blackboard).
- Once the 15-minute deadline to submit the single pdf file has passed you will not be able to submit your written work to the course website (Blackboard) and you should contact me immediately.
- Failure to submit your work by the deadline can result in a loss of points.

Extra Credit Opportunities

Information

- We may have extra credit opportunities during the course.
- The extra credit opportunities will be announced during the normal course of the semester and will be on our course website (Blackboard).
- To receive points for the extra credit, you must follow all instructions completely and completely complete the opportunity.
- The instructor will determine how much if any points are awarded for the extra credit opportunity.

Remarks

- Please remember that extra credit is a reward for extra work that contributes to your learning.
- It is not to replace an exam, quiz, assessment and it is not points given to you to bring up a poor score or poor performance.
- Extra credit opportunities are above and beyond your normal course work. That is to say that you should focus on your normal coursework and then extra credit.

Late Work

Information

- Late work can be accepted up to a week late (with a penalty not exceeding 20%).

- The expectation is that you talk with me before the due date.
 - You don't need to let me know if you are going to be late for the homework assignments this is set up already in ALEKS.
 - If you have any questions about this, please feel free to contact me.
- Please remember that if you do not turn in your work before the due date, you can receive a zero for the assignment.
- It is the instructor's decision whether late work is accepted or not.
- If you have questions about this, please feel free to contact me.
- If the work is accepted after the due date, it can take several weeks to get back.
 - This means that you may not get the assignment grade or feedback until several weeks after you turn in the work late.

Late Assignments

- Homework assignments can be accepted late for up to one week.
 - The late assignments will have a per day penalty assessed or an overall penalty depending on the assignment.
- You can find the due dates for homework on ALEKS.
- Other assignment due dates can be found on our course calendar and/or class website (Blackboard).

Late Written Work (Online Courses)

- Written work (see Exams section) not submitted within 15 minutes completing the exam will be considered late.
- The folder that you submit the work to on our course website (Blackboard) will close after the due date/time has passed and you won't be able to submit it.
- You should contact me as soon as possible and send me the single pdf file of your work.

Core Assessment

Information

- The core assessment is a part of the course to assess the learning and comprehension in the course.
- It generally consists of working on more involved questions that require a lot of the skills and knowledge that the course covers (for example an application problem).
- The core assessment is part of the final exam and worth 20% of the final.

Make-up Assignments, Exams, Quizzes, Etc.

Information

- Make-ups assignments, exams, quizzes, etc. are not given without the approval of the instructor.

- You will need to provide documented evidence for the reason you need to take the make-up assignment, exam, quiz, etc.
 - This can take the form of a doctor's note, jury summons, etc.
- Make-up is not given without acceptable reason and evidence.
- It is the instructor's decision whether to accept the reason and evidence provided and to give the make-up or not.

Quizzes

Information

- Quizzes are given to assess students learning.
- They can be in-class or online.
- They can be announced or not.
- For online quizzes you can find them on our course calendar and/or class website (Blackboard).
- Sections on the quiz can be found on the course calendar and on the quiz itself.
- **You do not need to upload** your written work for quizzes.
- Once you begin a quiz, you must **complete it in one sitting**.
- **Respondus LockDown Browser and Webcam are required** for all quizzes.
- Weekly quizzes are one way to show participation in the course.
- To succeed in the course, you should be participating every week.
- Because quizzes count as active participation, **you must take them each week**.
- Missed quizzes will **not** be reopened.
- Quizzes count for **10% of your assignment grade**.
- If you have any questions, please contact me.

Retakes

- **There are no retakes of any exams and quizzes.**
- If you have any questions, please feel free to contact me.