Intermediate Algebra (TMTH-0375)



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 0165 BASE NCBO (Mathematics)

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.

Learning Outcomes

Upon successful completion of this course, students will:

- 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.
- Model, interpret, and justify mathematical ideas and concepts using multiple representations.
- Connect and use multiple strands of mathematics in situations and problems, as well as in the study of other disciplines.

INSTRUCTOR CONTACT INFORMATION

Instructor:	Daniel Dove	
Email:	dadove@lit.edu	
Office Phone:	(409) 247-5017	
Office Location:	TC 112 A	
Office Hours:	M: 11:30 – 12:30, 2:00 - 2:30	
	T: T 8:30 - 9:30, 12:30 - 2:30	
	W: 11:30 - 12:30, 2:00-2:30	
	R: 8:30 - 9:30, 1:30 - 2:30	
	F: 10:30-2:30	

REQUIRED TEXTBOOK AND MATERIALS

- 1. College Algebra, by Sullivan, 11th edition with MyLabMath Access (18 week). You will access this material on the first day through Blackboard.
- **2.** You will need at least a scientific calculator. No phones as calculators or calculators on the computer or tablets allowed.

ATTENDANCE POLICY

Attendance is mandatory and will count as an exam grade. The grade will be determined by the ratio of number of days attended to total class days. Three "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 extenuating circumstances. In addition, all exams will be in person on days listed in the course schedule or as announced in class and Blackboard. 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 responsible for initiating and completing the drop process by the specified drop date as listed on the <u>Academic Calendar</u>. If you stop coming to class and fail to drop the course, you will earn an "F" 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.

Week	Material Covered	Due Date
		(all assignments due by 11:59pm on due date)
Jan 21-	Module 1 Real Numbers and Introduction to	
Jan24	Algebraic Expressions Parts 1-3	
Jan 27- 31	Module 1 Parts 4-6	
Feb 3-Feb 7	Module 2 Solving Equations and Inequalities (Linear and Absolute Value) Parts 1 -5	Netiquette and MyMathLab Orientation Assignment All Module 1 Assignments
Feb 10 – Feb 14	Module 2 Parts 6-9	
Feb 17-Feb 21	Module 3 Introduction to Polynomials Parts 1- 3	ALL Module 2 Assignments Modules 1 and 2 Test
Feb 24-Feb 28	Module 3 Parts 4 and 5	
Mar 3 – Mar 7	Module 4 Factoring Parts 1-3	All Module 3 Assignments
Mar 10 – Mar 14	Spring Break	
Mar 17-Mar 21	Module 4 Parts 4-6	
Mar 24-Mar 28	Module 5 Rational Expressions and Equations Parts 1-3	Synchronous Class Meeting #2 ALL Module 4 Assignments Due Modules 3 and 4 Test
Mar 31 – Apr 4	Module 5 Parts 4-6	
Apr 7 – Apr 11. No classes Thursday, April 10.	Module 6 Radical Expressions and Equations Parts 1-4	ALL Module 5 Assignments
Apr 14-Apr 17	Module 6 Parts 5-7	April 18, Good Friday Holiday
Apr 28-May 2	Module 7 Quadratic Equations and Complex Numbers Parts 1 -4	ALL Module 6 Assignments Modules 5 and 6 Test
May 5- 7	Module 8 Functions Parts 1-5	ALL Module 7 Assignments ALL Module 8 Assignments
May 12 (Subject to Change)		Modules 7 and 8 Test

Course Schedule (Dates subject to change with notice in Blackboard)

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

Online 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 <u>https://lit.edu/online-learning/online-learning-minimum-computer-requirements</u>. 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 accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email <u>special Populations@lit.edu</u>. You may also visit the online resource at <u>Special Populations - Lamar Institute of Technology (lit.edu</u>).

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 <u>www.lit.edu</u>. 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

Instructor Expectations from Students:

- Weekly email communication and Blackboard announcements regarding assignment and upcoming test due dates
- Response to email within 24 hours Sunday through Thursday, or within 48 hours Friday and Saturday.
- Flexible office hour/ virtual help when needed.
- Weekly grade updates

Instructor Expectations of Students:

- Seek help from instructor early and often, do not wait until the last minute!
- On exams, all of your work should be completely your own. You are allowed scratch paper, a pencil, and your calculator. Any evidence of cheating could

result in a zero on that particular exam. Repeated offenses will cause you to fail the course and to be referred to the department chair for disciplinary action.

- Plan ahead; if you will miss an exam, make prior arrangements to take it early or schedule a make-up within 24 hours or you will earn a zero on the exam! I may require documentation (like a doctor's note) if you do not schedule the makeup within 24 hours or can not make up the exam the same week.
- When sending emails identify yourself with class and section.