

Advanced Intermediate Algebra (TMTH 0214)

CREDIT

2 Semester Credit Hours (2 hours lecture)

MODE OF INSTRUCTION

Face-to-Face

PREREQUISITE/CO-REQUISITE:

- A score of 336-349 on the TSI-Assessment placement test.
- Must be co-enrolled in MATH 1314 College 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.

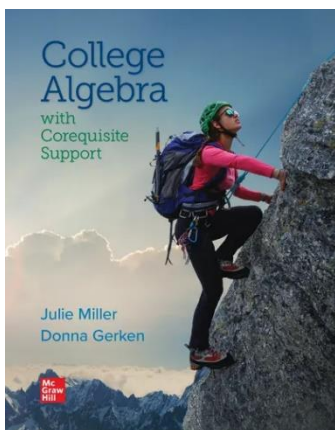


**LAMAR INSTITUTE
OF TECHNOLOGY**

INSTRUCTOR CONTACT INFORMATION

Instructor:	James Jean
Email:	jjean@lit.edu
Office Phone:	(409) 880-8321
Office Location:	T5 – Rm 103
Office Hours:	Mon: 8:00 am – 9:00 am; 1:00 pm – 2:00 pm Tues: 9:30 am – 10:30 am; 12:00 pm – 1:30 pm Wed: 8:00 am – 9:00 am; 1:00 pm – 2:00 pm Thurs: 9:30 am – 10:30 am; 12:00 pm – 1:30 pm Fri: 8:30 am – 9:30 am

REQUIRED TEXTBOOK AND MATERIALS



ALEKS *College Algebra*. 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:

Paper, pencils, and a calculator, access to a computer with internet access.

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

<i>Week Of:</i>	<i>Sec</i>	<i>Topic</i>	<i>Homework due:</i>
08/24		Introduction	Test 1 HW due 09/06
	R.1	Operations on Fractions	
	R.2	The Set of Real Numbers	
	R.3	Simplifying Numerical Expressions	
	1.1	Algebraic Expressions and Models	
	1.2	Linear Equations in One Variable	
	1.5	Linear and Compound Inequalities	
08/31	1.6	Absolute Value Equations	Test 1: 09/06
	1.7	Absolute Value Inequalities	
	2.1	Integer Exponents and Scientific Notation	
	2.2	Operations on Polynomials	
	2.3	Greatest Common Factor and Factoring by Grouping	
		TMTH 0214 Test 1	
09/07	2.4	Factoring Trinomials	Test 2 HW due 09/20
	2.5	Factoring Binomials	
	3.1	Introduction to Radicals and Their Simplification	
	3.2	Multiplying Radicals and Rationalizing the Denominator	
	3.4	Solving Quadratic Equations by Factoring	
09/14	3.5	Solving Quadratic Equations by Using the Square Root Property	Test 2: 09/20
	4.1	Multiplication and Division of Rational Expressions	
	4.2	Addition and Subtraction of Rational Expressions	
	4.5	Rational Exponents	
		Test 2	

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

- **TMTH Tests** 60%
- **TMTH Assignments** 40%

GRADE SCALE

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

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

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. 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 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.