MATH 1314 (2D1) and TMTH 0214 (2A1)

College Algebra and Adv Intermediate Algebra (CM2)

CREDIT
MATH 1314: 3 Semester Credit Hours (3 hours lecture, 0 hours lab)
TMTH 0214: 2 Semester Credit Hours (2 hours lecture, 0 hours lab)

MODE OF INSTRUCTION
Online

PREREQUISITE/CO-REQUISITE:
Must be co-enrolled in MATH 1314 College Algebra and TMTH 0214.

COURSE DESCRIPTION
MATH 1314: In-depth study and applications of polynomial, rational, radical, exponential, and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included.
TMTH 0214: 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
MATH 1314: Upon completion of this course, the student will be able to
1. Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.
2. Recognize and apply polynomial, rational, radical, exponential, and logarithmic functions and solve related equations.
3. Apply graphing techniques.
4. Evaluate all roots of higher degree polynomial and rational functions.
5. Recognize, solve, and apply systems of linear equations using matrices.

TMTH 0214: 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: Jamie Hagler Barron

Email: (Communication for the course will be through Blackboard)
                                    jhbarron@lit.edu

Office Phone: Note that I do not have access to an office phone line.
                                    Contact me through the Messages tab in Blackboard.

Office Hours: Virtual Office Hours - contact me through the Messages tab in
                                    Blackboard

REQUIRED TEXTBOOK AND MATERIALS
1. MyMathLab Standalone Access – it is best to sign up through Blackboard.
    In the MATH 1314 Blackboard course - see "LIT Student Registration Instructions for MyLab"
    NOTE: One code will work for both MATH 1314 and TMTH 0214.
2. There is NO TEXTBOOK for this class but you will be responsible for printing out the class notes
    and exercises (located in Blackboard).
3. A basic scientific calculator
    You will NOT be allowed to use a graphing calculator or your device's calculator.
4. A binder, notebook paper, graph paper, a folder, pencils, erasers, and a ruler. Optional: highlighters

ATTENDANCE POLICY
This is an online course - you are required to log into the course three times a week.

DROP POLICY
If you wish to drop a course, you are responsible for initiating and completing the drop process.
If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

GRADE SCALE

MATH 1314
- 90-100   A
- 80-89   B
- 70-79   C
- 60-69   D
- 0-59   F

TMTH 0214
- 90 – 100 DA
- 80 – 89 DB
- 70 – 79 DC
- 0 – 69 DF

COURSE EVALUATION
Final grades will be calculated according to the following criteria:

MATH 1314
- Tests 60%
- Assignments 20%
- Core Assessment 20%

TMTH 0214
- Assignments 100%
- There is no Core Assessment or Tests

COURSE CALENDAR

Platform	TMTH 0214 ASSIGNMENTS (Online Class)	DUE DATE (subject to change)
MyMathLab	Netiquette and MyMathLab Orientation Assignment	8/31/24
MyMathLab	Module 1-3 Operations on Rational Numbers	
MyMathLab	Module 1-4 Properties of Real Numbers	
MyMathLab	Module 1-5 Order of Operations and Exponents	
MyMathLab	Module 1-6 Simplifying Algebraic Expressions	9/7/24
MyMathLab	Module 4-1 Greatest Common Factor and Factor by Grouping	
MyMathLab	Module 4-3 Factoring Trinomials Part B	
MyMathLab	Module 4-4 Factoring Special Products	
MyMathLab	Module 4-5 Solve Polynomial Equations by Factoring	
MyMathLab	Module 7-1 Solve Quadratic Equations By Factoring	9/14/24
MyMathLab	Module 7-2 Solve Quadratic Equ. by Completing the Square	
MyMathLab	Module 7-3 Solve Quadratic Equ. by Using the Quad. Formula	
MyMathLab	Module 7-4 Complex Numbers	
MyMathLab	Module 8-1 Relations	
MyMathLab	Module 8-2 Introduction to Functions	9/21/24
MyMathLab	Module 8-3 Functions and Their Graphs	
MyMathLab	Module 8-4 Linear Functions and Their Models	
MyMathLab	Module 8-5 Quadratic Functions	
***You have now completed the assignments for TMTH 0214 - Adv Intermediate Algebra (CM2) ***Proceed to the assignments in MATH 1314 – College Algebra (CM2)		

COURSE CALENDAR

Platform	MATH 1314 ASSIGNMENTS and TESTS (Online Class)	DUE DATE (subject to change)
MyMathLab	1.1 Linear Equations	9/28/2024
MyMathLab	1.2 Quadratic Equations	
MyMathLab	1.4 Radical Equations	
MyMathLab	2.2 Graphs of Equations in Two Variables; Intercepts; Symmetry	10/5/24
MyMathLab	2.3 Lines	
MyMathLab	3.1 Functions	
MyMathLab	3.2 The Graph of a Function	10/12/24
MyMathLab	3.3 Properties of Functions	
MyMathLab	3.4 Library of Functions; Piecewise-defined Functions	
MyMathLab	3.5 Graphing Techniques; Transformations	10/19/24
MyMathLab	Test 1 Ch. 1-3	
MyMathLab	4.1 Properties of Linear Functions and Linear Models	10/26/24
MyMathLab	4.3 Quadratic Functions and Their Properties	
MyMathLab	5.1 Polynomial Functions	
MyMathLab	5.2 Graphing Polynomial Functions; Models	11/2/24
MyMathLab	5.3 Properties of Rational Functions	
MyMathLab	5.4 The Graph of a Rational Function	
MyMathLab	5.6 The Real Zeros of a Polynomial Function	11/9/24
MyMathLab	5.7 Complex Zeros; Fundamental Theorem of Algebra	
MyMathLab	Test 2 Ch. 4-5	

MyMathLab	6.1 Composite Functions	11/16/24
MyMathLab	6.2 One-to-One Functions; Inverse Functions	
MyMathLab	6.3 Exponential Functions	
MyMathLab	6.4 Logarithmic Functions	11/23/24
MyMathLab	6.5 Properties of Logarithms	
MyMathLab	6.6 Logarithmic and Exponential Equations	
MyMathLab	6.7 Financial Models	11/30/24
MyMathLab	8.1 Systems of Linear Equations	
MyMathLab	8.2 Systems of Linear Equations: Matrices	
MyMathLab	Test 3 Ch. 6 & 8	**FRIDAY**, 12/6/24
MyMathLab	Core Assessment Activity	
MyMathLab	Final Review	
MyMathLab	Final Exam	Open: 12/7/24-12/12/24

TECHNICAL REQUIREMENTS

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at https://lit.edu/online-learning/online-learning-minimum-computer-requirements. 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
Note that the instructor does not have a physical office at Lamar Institute of Technology.
Contact the instructor through Messages tab on Blackboard (not by email).
Instructor will respond within 24 hours.

Virtual office hours are by appointment only:
If you need help, send the instructor through Messages tab on Blackboard.
You will receive a link and the time for a Collaborate Video Conferencing meeting.

Late work will NOT be accepted.
This is an online course – all assignments (except for the Final Exam) are open from the first day of class until the due date. Work ahead, but do not fall behind.
It is the student's responsibility to make sure all technology is working (including the device and internet/Wi-Fi) and have a back up plan in case issues arise.
Due dates will NOT be extended due to technical issues (unless it is a established issue with Blackboard or MyMathLab – then students will be notified of the issues through Announcements in Blackboard).

Technical assistance:
• For technical issues - helpdesk@lit.edu (409) 839-2074
• For online academic concerns - distanced@lit.edu (409) 880-7432
• Pearson Publishing (for MyMathLab problems)
  https://mlm.pearson.com/northamerica/mymathlab/students/support/index.html

Check Blackboard OFTEN for Announcements and due dates.