Base NCBO Algebra (TMTH 0165-3A1)

LAMAR INSTITUTE OF TECHNOLOGY

INSTRUCTOR CONTACT INFORMATION

Instructor: Alfred de la Rosa, Jr.

Email: adelarosa@lit.edu

Office Phone: (409) 247-4757

Office Location: Building TA5, Room 103

Office Hours: Monday: 9:00 am-10:00 am
Tuesday: 9:00 am-10:00 am
Wednesday: 9:00 am-10:00 am
Thursday: 9:00 am-10:00 am
Friday: By Appointment Only

CREDIT
1 Semester Credit Hour (1-hour lecture)

MODE OF INSTRUCTION
Face-to-face

PREREQUISITE/CO-REQUISITE:
Must be co-enrolled in TMTH 0375 (Intermediate 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.

Approved: Initials/date

REQUIRED TEXTBOOK AND MATERIALS

1. A Pearson *MyMathLab* standalone access code
    a. Once students have access to this class in Blackboard, they will be able to access the Pearson website and purchase a code online directly from Pearson.
    OR
    b. May be purchased at a local bookstore:
    18-Week Standalone Access Card: ISBN 9780135910269
2. Basic scientific calculator recommended. No graphing calculators or cell phone calculators are allowed.

ATTENDANCE POLICY

Each student will be required to sign a sign-in sheet at the beginning of each class period. **Anyone who does not sign in will be marked absent.** Students more than 15 minutes late for class will be marked absent and will not be allowed to sign in. **A roll call may be given at the end of the class period to ensure accuracy of the sign-in sheet.** Absences due to an illness or emergency will be excused if the student provides valid documentation. *Exception: Medical or dental appointments that coincide with the class period will not be excused*.

Each student's final grade in the NCBO will consist of a daily grade based on attendance and his/her *MyMathLab* participation during the entire duration of each NCBO class session. This also means that to be counted present, the student must attend on time and remain in the classroom until the instructor dismisses the class.

DROP POLICY

If you wish to drop the course (if eligible), you are responsible for initiating and completing the drop process by the specified drop date as listed on the Academic Calendar. **If you drop this class, you must also drop TMTH 0375.** If you stop coming to class and fail to drop the course, you will earn a "DF" 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.

COURSE CALENDAR

DATE	TOPIC	READINGS (Due on this Date)	ASSIGNMENTS (Due on this Date)
7-10-24	Module 1 Part 1: The Real Numbers Part 2: Addition and Subtraction of Real Numbers Part 3: Applications Involving the Addition and Subtraction of Real Numbers Part 4: Multiplication and Division of Real Numbers Part 5: Applications Involving the Multiplication and Division of Real Numbers Part 6: Order of Operations Part 7: Introduction to Algebra Part 8: Properties of Real Numbers	Module 1 Worksheets **Wednesday, July 10, 2024**	MyMathLab: Module 1, Parts 1-8 **Sunday, July 21, 2024**
7-15-24	Module 2 Part 1: Solving One-Step Equations with Addition and Subtraction Part 2: Solving One-Step Equations with Multiplication and Division Part 3: Solving Multi-Step Equations Part 4: Solving More Multi-Step Equations Part 5 Solving Absolute Value Equations Part 7: Introduction to Inequalities Part 8: Solving Inequalities Part 9: Solving Absolute Value Inequalities	Module 2 Worksheets **Monday, July 15, 2023**	MyMathLab: Module 2, Parts 1-5, 7-9 **Sunday, July 21, 2024**
7-17-24	Module 3 Part 1: Exponents Part 2: Rules of Exponents Part 4: Introduction to Polynomials	Module 3 Worksheets **Wednesday, July 17, 2024**	MyMathLab: Module 3, Parts 1-2, 4-11 **Sunday, July 21, 2024**

7-17-24	Part 5: Evaluating Polynomials Part 6: Addition of Polynomials Part 7: Subtraction of Polynomials Part 8: Multiplication of Polynomials Part 9: More Multiplication of Polynomials Part 10: Division of Polynomials by Monomials Part 11: Division of Polynomials	Module 3 Worksheets **Wednesday, July 17, 2024**	MyMathLab: Module 3, Parts 1-2, 4-11 **Sunday, July 21, 2024**
7-22-24	Module 4 Part 1: Factoring and the Greatest Common Factor Part 2: Factoring by Grouping Part 3: Factoring Trinomials Part 4: Factoring More Trinomials Part 5: Factoring Binomials	Module 4 Worksheets **Monday, July 22, 2024**	MyMathLab: Module 4, Parts 1-5 **Sunday, July 28, 2024**
7-29-24	Module 5 Part 1: Finding All Numbers for Which a Rational Expression is Not Defined Part 2: Simplifying Rational Expressions Part 3: Multiplying Rational Expressions Part 4: Dividing Rational Expressions Part 5: Finding the Least Common Denominator Part 6: Adding Rational Expressions Part 7: Subtracting Rational Expressions Part 9: Solving Rational Equations Part 10: Applications Using Rational Equations	Module 5 Worksheets **Monday, July 29, 2024**	MyMathLab: Module 5, Parts 1-7, 9-10 **Tuesday, August 6, 2024**
7-31-24	Module 6 Part 1: Introduction to Radical Expressions	Module 6 Worksheets **Wednesday, July 31, 2024**	MyMathLab: Module 6, Parts 1-7, 9 **Tuesday, August 6, 2024**

7-31-24	Part 2: Simplifying Radical Expressions Part 3: Multiplying Radical Expressions Part 4: Dividing Square Roots Part 5: Rationalizing the Denominator Part 6: Adding and Subtracting Radical Expressions Part 7: Multiplying Radical Expressions (FOIL) Part 9: Solving One-Radical Equations	Module 6 Worksheets **Wednesday, July 31, 2024**	MyMathLab: Module 6, Parts 1-7, 9 **Tuesday, August 6, 2024**
8-7-24	Module 7 Part 1: Addition and Subtraction of Complex Numbers Part 2: Multiplication of Complex Numbers Part 3: Dividing Complex Numbers	Module 7 Worksheets **Wednesday, August 7, 2024**	MyMathLab: Module 7, Parts 1-3 **Wednesday, August 14, 2024**
8-8-23	Module 8 Part 1: Solving Quadratic Equations by Factoring Part 2: Solving Quadratic Equations Using the Principle of Square Roots Part 3: Solving Quadratic Equations by Completing the Square Part 4: Solving Quadratic Equations Using the Quadratic Formula Module 9 Part 1: Introduction to Functions Part 2: Function Notation	Module 8 Worksheets **Thursday, August 8, 2024**	MyMathLab: Module 8, Parts 1-4 MyMathLab: Module 9 Parts 1-2 **Wednesday, August 14, 2024**

COURSE EVALUATION

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--Satisfactory
- 0-69 U--Unsatisfactory

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 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.

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

1. The student will be expected to have access to the internet and a computer.
2. No food, drinks, or use of tobacco products in class.
3. Laptops, telephones, and any other electronic devices must be turned off during class.
4. A final grade of Incomplete will only be given if a student is passing the course and is missing only one major assignment. Such an arrangement must be made with the instructor. An incomplete assignment must be finished during the next long semester or a grade of "I" will become an "F."