

Northeastern Technical College

MAT 110

College Algebra

Course : Mat 110
Title : College Algebra
Credits: 3 Hours

Instructor:

Office: **email:**
Office Hours: **Telephone Number:**

Prerequisites: Acceptable placement score or completion of MAT 102 with a C or better.

Description: This course includes the following topics: Polynomial, rational, logarithmic and exponential functions; inequalities; systems of equations and inequalities; matrices; determinants; and solutions to higher degree polynomials.

Textbook(s) or Alternative: Algebra and Trigonometry, 5th edition, by Blitzer. Graphing and /or scientific calculators are required.

College Wide Competencies: Apply mathematical/computational skills to solve problems.

Student Learning Outcomes: The student will be able to:

1. solve algebraic equations and inequalities.
2. evaluate and graph algebraic relations and functions.

General Education Outcome: Graduates will be able to:

1. use a systematic approach to solving problems.

Attendance: (Math Department) Students are expected to attend all scheduled classes and are responsible for all class work, homework, notes, etc., whether or not they are present. In the event of extenuating circumstances, the student is allowed to miss up to 8 hours. The student will be dropped after missing more than 8 hours of the scheduled classes. If an instructor drops a student for excessive absences at any time during the semester, a grade of "F" will be assigned. If the student withdraws from the course, a grade of "W" or "WF" will be assigned as outlined in the college catalog. A student is considered tardy if he or she arrives for class after the roll has been taken. Three tardies constitute 1 hour of absence.

Academic Dishonesty: Students are expected to do their own work. Please refer to the NETC Student Code and Grievance Procedure for a definition of academic dishonesty and an outline of the disciplinary action that may result.

Student Disabilities:

Students with disabilities are encouraged to contact the Dean of Student Services to discuss needs or concerns as they pursue an academic program and participate in campus life. The Dean of Student Services will provide guidance regarding official documentation of disabilities and/or accommodation of needs.

Classroom Etiquette:

1. Electronic communication devices (pagers, cell phones, etc.) are NOT allowed in the classroom. On-call emergency personnel should see the instructor for an exemption.
2. No visible food or drinks are allowed in the classrooms.
3. No radio or headphones are allowed in the classrooms

ID Policy:

It is mandatory that every student wears his/her ID at all times when on the Cheraw campus. During the first week of classes, the instructor will issue a reminder to wear the ID. This reminder is a warning. After the first week of classes, instructors are required to dismiss students without an ID from class. The student may get his/her ID (or purchase a temporary or new one in Student Services) and return to class before the midpoint of the class. If the student cannot get an ID and return to class by the midpoint, the instructor will record the absence.

Evaluative Methods to Appraise Objectives:

Chapter or topical tests and a departmental final exam will be used to compute your grade for MAT 110. The final grade will be 80% of the test average plus 20% of the exam grade. **No** test grades will be dropped under any circumstances.

Make-Up Test Procedure:

No make-up tests are given except in extenuating circumstances. The **student** is responsible for contacting the instructor prior to the time the test is scheduled to arrange a meeting to discuss the process of making up the missed test.

Grading Scale:

A	93 - 100
B	85 - 92
C	77 - 84
D	70 - 76
F	Below 70

Tentative Class Outline

<u>WEEK</u>	<u>SECTIONS</u>	<u>TOPIC</u>	
1	2.1	Basics of Functions and Their Graphs	Test 1 _____
	2.2	More on Functions and Their Graphs	
2 - 3	2.5	Transformations of Functions	Test 2 _____
	2.6	Combination of Functions; Composite Functions	
	2.7	Inverse Functions	
4 - 6	3.1	Quadratic Functions	Test 3 _____
	3.2	Polynomial Functions and Their Graphs	
	3.3	Dividing Polynomials	
	3.4	Zeros of Polynomials	
7 - 9	3.5	Rational Functions and Their Graphs	Test 4 _____
	3.6	Polynomials and Rational Inequalities	
10 - 12	4.1	Exponential Functions	Test 5 _____
	4.2	Logarithmic Functions	
	4.3	Properties of Logarithms	
	4.4	Exponential and Logarithmic Equations	
	4.5	Exponential Growth and Decay; Modeling Data	
13 - 15	8.1	Systems of Linear Equations in Two Variables	Test 6 _____
	8.2	Systems of Linear Equations in Three Variables	
	9.5	Determinants and Cramer's Rule	
	8.5	Systems of Inequalities	
	9.3	Matrix Operations	

Final Exam

Cramer's Rule-Optional