

# Northeastern Technical College

## MAT 102

### Intermediate Algebra

**Course:** MAT 102

**Title :** Intermediate Algebra

**Credits :** 3 hours

**Instructor:**

**email:**

**Office:**

**Telephone Number:**

**Office Hours:**

**Prerequisites:** Acceptable placement score or completion of MAT 101 with a grade of "C" or better.

**Description:** This course includes the following topics: Properties of numbers; fundamental operations with algebraic expressions; polynomials; systems of equations; ratio and proportion; factoring; functions; graphs; solutions of linear inequalities; and linear and quadratic equations.

**Textbook(s) or Alternative:** Algebra: Introductory and Intermediate, 4<sup>th</sup> edition, Aufmann, Barker, and Lockwood. Houghton Mifflin Co.

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

**Learning Outcomes:** The student will able to:

1. simplify and solve problems with algebraic expressions, polynomials, systems of equations, ratio and proportion, and radicals.
2. graph and solve linear and quadratic inequalities, equations, and functions.

**Attendance:** (Math Department Policy) 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, such as illness, you are allowed to miss **up to 8** hours. The student will be dropped after missing more than 8 hours of scheduled classes. If an instructor drops a student for excessive absences at any time during the semester, a grade of AF@ will be assigned. If the student withdraws from the course, a grade of AW@ or AWF@ will be assigned as outlined in the college catalog. **THERE IS NO SUCH THING AS AN EXCUSED ABSENCE!! IF YOU EXCEED THE ALLOWED NUMBER OF ABSENCES, YOU WILL BE DROPPED.** A student is considered tardy if not present for roll call, which is taken at the beginning of the class. 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 Vice-President for Student Services to discuss needs or concerns as they pursue an academic program and participate in campus life. The Vice-President for 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 a new one in Student Services for \$3.00) 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 final exam will be used to compute your grade for MAT 102. Your final grade for the course will be made up of 80% of the test average plus 20% of the exam grade. A final exam will be given and **NO** test grades will be dropped.

### **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:**

The grade point scale that will be used is as follows:

- A = 93 - 100
- B = 85 - 92
- C = 77 - 84
- D = 69 - 76
- F = below 69

## Tentative Class Outline

<u>Week</u>	<u>Sect.</u>	<u>Description</u>	
1 – 2	5.1 5.2 A	Solving Systems of Linear Equations by Graphing and by the Substitution Method Solving Systems of Two Linear Equations in Two Variables by the Addition Method	TEST 1 _____
3	5.2 B 5.5	Solving Systems of Three Linear Equations in Three Variables by the Addition Method Solving Systems of Equations by Using Determinants	TEST 2 _____
4 - 5	5.3 5.4	Application Problems in Two Variables Solving Systems of Linear Inequalities	TEST 3 _____
6 - 8	8.1 8.2 8.3	Multiplication and Division of Rational Expressions Addition and Subtraction of Rational Expressions Complex Fractions	TEST 4 _____
9	8.4 & 8.5 8.6	Rational Equations, Ratio and Proportion Literal Equations	TEST 5 _____
10 - 11	9.1 9.2	Rational Exponents and Radicals Expressions Operations on Radical Expressions	TEST 6 _____
12 - 13	9.3 9.4	Radical Equations Complex Numbers	TEST 7 _____
14 - 15	10.1 10.2 10.3	Solving Quadratic Equations by Factoring or by Taking Square Roots Solving Quadratic Equations by Completing the Square Solving Quadratic Equations by Using the Quadratic Formula	TEST 8 _____
EXAM			