

**NORTHEASTERN TECHNICAL COLLEGE  
COURSE OUTLINE**

<b>COURSE:</b>	<b>PREFIX</b>	<b>NO.</b>	<b>EFFECTIVE DATE</b>	<b>NEXT REVIEW DATE</b>
	MAT	101	August 2011	August 2012
<b>TITLE:</b>			<b>CREDITS</b>	<b>CONTACTS</b>
				<b>CLASS - LAB - TOTAL</b>
Beginning Algebra			3	3    0    3

**PREREQUISITES:** Acceptable placement score or completion of MAT 150 with grade of "C" or better.

**DESCRIPTION:** This course includes the study of rational numbers and their applications, operations with algebraic expressions, linear equations and applications, linear inequalities, graphs of linear equations, operations with exponents and polynomials, and factoring.

**TEXTBOOK(S) OR ALTERNATIVE:** Algebra: Introductory and Intermediate, 5<sup>th</sup> edition, Aufmann, Barker, and Lockwood; Houghton Mifflin Co.

**MATERIALS:** Graphing and/or scientific calculators are strongly recommended.

**COLLATERAL READING:** None

**CLASS MANAGEMENT ACTIVITIES** (Attendance, tardies, testing, academic dishonesty, etc.)

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.

Attendance: 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 a F will be assigned. If the student withdraws from the course, a grade of a W or a WF 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

Tardies: A student is considered tardy if not present for roll call

which is taken at the beginning of the class. Three tardies will be considered as one-hour absence.

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.

Student ID Policy:

It is mandatory that every student wear 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.

Disabilities Statement: 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. (See College Catalog)

RESOURCES (A-V, persons, tools/equipment): Videotapes and tutorial software covering all topics are in the NETC Student Success Center.

COURSE TOPICAL OUTLINE: (List topics and sub-topics of course) and Calendar or approximate length of time devoted to topic.

TENTATIVE CLASS OUTLINE

<u>WEEK (S)</u>	<u>SECTION</u>	<u>TOPIC</u>
1 - 3	2.1	Introduction to Equations

- 2.2 General Equations
- 2.3 Translating Sentences into Equations
- 2.4 Mixture and Uniform Motion Problems

**TEST 1** \_\_\_\_\_

- 4 - 5 2.5 Inequalities
- 2.6 Absolute-Value Equations and Inequalities

**TEST 2** \_\_\_\_\_

- 6 - 7 6.1 Exponential Expressions (Objs A & B only)
- 6.2 Introduction to Polynomial Functions
- 6.3 Multiplication of Polynomials
- 6.4 Division of Polynomials (Obj. A only)

**TEST 3** \_\_\_\_\_

**COURSE TOPICAL OUTLINE:** (Continued)

<u>WEEK (S)</u>	<u>SECTION</u>	<u>TOPIC</u>
8 - 10	7.1	Common Factors
	7.2	Factoring Polynomials of the Form $x^2 + bx + c$
	7.3	Factoring Polynomials of the Form $ax^2 + bx + c$
	7.4	Special Factoring
		<b>TEST 4</b> _____
11	7.5	Solving Quadratic Equations
		<b>TEST 5</b> _____
12-13	4.1	The rectangular Coordinate System (Objs A & B only)
	4.3	Linear Functions
	4.4	Slope of a Straight Line
		<b>TEST 6</b> _____
14-15	4.5	Finding Equations of Lines
	4.6	Parallel and Perpendicular Lines
	4.7	Inequalities in Two Variables
		<b>TEST 7</b> _____

**EXAM**

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**COLLEGE WIDE COMPETENCIES:**

The student will be able to apply mathematical/computational skills to solve problems.

**STUDENT LEARNING OUTCOMES / OBJECTIVES OF COURSE:**

The student will be able to:

1. Solve linear and absolute value equations and inequalities
2. Graph linear equations and inequalities
3. Perform fundamental operations on polynomials by applying operations of exponents
4. Factor polynomial expressions
5. Solve quadratic equations by factoring
6. Solve real world application problems using algebraic techniques

**INSTRUCTIONAL METHODS TO COMPLETE OBJECTIVES:** Lectures covering course material will be supplemented by problem solving.

**EVALUATIVE METHODS TO APPRAISE OBJECTIVES:** Chapter or topical tests and a final exam will be used to compute your grade for MAT 101. The 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:

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

Course Outline

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Below 69 = F