

**NORTHEASTERN TECHNICAL COLLEGE  
COURSE OUTLINE**

<b>COURSE:</b>	<b>PREFIX NO.</b>	<b>EFFECTIVE DATE</b>	<b>NEXT REVIEW DATE</b>		
MAT	212	Fall 2010	Fall 2011		
<b>TITLE:</b>		<b>CREDITS</b>	<b>CONTACTS</b>		
Mathematics For Elementary Education II		3	<b>CLASS</b>	<b>- LAB</b>	<b>- CLASS</b>
			3	0	3

**PREREQUISITE:** Acceptable placement score or completion of MAT 102 with a grade of "C" or better.

**DESCRIPTION:** This course includes the following topics: basic algebra, geometry, probability, and statistics.

**TEXTBOOK(S) OR ALTERNATIVE:** A Problem Solving Approach to Mathematics for Elementary School Teachers, 10<sup>th</sup> edition, 2010, by Billstein, Libeskind, and Lott.

**MATERIALS:** It is strongly recommended that students purchase graphing and/or scientific calculators.

**COLLATERAL READING:** None

**CLASS MANAGEMENT ACTIVITIES (attendance, tardies, testing, 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 classwork, 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 eight (8) hours. The student will be dropped after missing more than eight (8) hours of scheduled classes. If the 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. 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 (1) hour of absence.

**Make-up Test:** 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.

**Classroom Etiquette:**

1. Electronic communication devices (pagers, cell phones) 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 classroom.
3. No radios or headphones are allowed in the classrooms.

**Student ID:** It is mandatory that every student wear his or her student ID at all times. 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 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 his/her ID and return to class by 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, audiotapes, and computerized instruction, drill and practice are available on selected topics 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**

<b><u>WEEKS</u></b>	<b><u>CHAPTER</u></b>	<b><u>DESCRIPTION</u></b>
1-3	9	Probability
4-6	10	Data Analysis/Statistics
7-9	11	Introductory Geometry
10-12	12	Constructions, Congruence, and Similarity
13-15	13	Concepts of Measurement

**STUDENT LEARNING OUTCOMES/OBJECTIVES OF COURSE:** The student will be able to:

1. understand the terminology of elementary probability theory
2. find probabilities and simulate probability problems
3. use permutations and combinations in counting processes
4. use spreadsheet to summarize data into tables and graphs and to describe data with measures of central tendency
5. make predictions from statistical data
6. comprehend the misuse of statistics
7. analyze properties of two and three dimensional geometric shapes
8. use Coordinate geometry
9. graph linear and quadratic equations

**COLLEGE WIDE COMPETENCIES:** Apply mathematical/computational skills to solve problems.

**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 212. Projects and/or additional assignments may be assigned at the instructor's discretion. The final grade will be 80% of the test average plus 20% of the exam grade. If the instructor

decides not to give a final exam, the student's grade will be the arithmetic average of all test grades. No test grades will be dropped under any circumstances.

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

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

**MATHEMATICAL/COMPUTATIONAL COMPETENCIES:**

- The student will be able to perform arithmetic operations using whole numbers, fractions, decimals and percentages using English and metric systems.
- The student will be able to solve problems using signed numbers, linear equations, and geometric formulas.
- The student will be able to construct and interpret various types of graphs.
- The student will be able to perform various types of measurements.