

**NORTHEASTERN TECHNICAL COLLEGE
COURSE OUTLINE**

COURSE: MAT	PREFIX NO. 168	EFFECTIVE DATE Summer 2007	NEXT REVIEW DATE Summer 2008		
TITLE: Geometry and Trigonometry		CREDITS 3	CONTACTS		
			CLASS	LAB	TOTAL
			3	0	3

PREREQUISITES:

MAT 155 with grade of "C" or better

DESCRIPTION:

This course includes the following topics: points, lines, angles, and angle measure; triangles; polygons; circles; geometric solids; trigonometric solution of triangles; graph of the sine function; and vectors. This course is available as a telecourse or traditional class.

TEXTBOOK(S):

INTRODUCTORY TECHNICAL MATHEMATICS, 5th edition, 2007 by Robert D. Smith; Thomson Publishers.

MATERIALS (specifying those to be purchased by student):

The student should purchase textbook, notebook paper, pencils, erasers, and a scientific hand-held calculator.

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 "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 class. Three tardies will be considered as one (1) hour of 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 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 on 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 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. (See College Catalog)

RESOURCES (A-V, persons, tools/equipment):

Computerized instruction, drill, and practice available on selected topics. Ask instructor for suggestions or visit the 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>WEEKS</u>	<u>UNIT</u>	<u>DESCRIPTION</u>
1-2	19 20	Introduction to Plane Geometry Angular Measurement TEST 1 _____
3-4	21	Angular Geometric Principles TEST 2 _____
5-6	22	Triangles TEST 3 _____

COURSE TOPICAL OUTLINE: (Continued)

<u>WEEKS</u>	<u>UNIT</u>	<u>DESCRIPTION</u>
7-8	23 24	Congruent and Similar Figures Polygons TEST 4 _____
9-11	25	Circles TEST 5 _____
12	28	Prisms and Cylinders TEST 6 _____
13-14	33 34 35 Sect. 36.3	Introduction to Trigonometric Functions Trigonometric Functions with Right Triangles Practical Applications with Right Triangles Sine Graphs TEST 7 _____
15	37	Vectors TEST 8 _____

EXAM

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

1. demonstrate an ability to apply the fundamentals of geometry to practical situations
2. compute measurements with solids
3. perform trigonometric solutions of triangles
4. graph the sine function
5. solve vectors

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 and computerized instruction and videotapes on selected topics.

EVALUATIVE METHODS TO APPRAISE OBJECTIVES:

Chapter or topical tests and a final exam will be used to compute your grade for MAT 168. 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.

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 = 69 - 76
F = Below 69