NORTHEASTERN TECHNICAL COLLEGE
COURSE OUTLINE

COURSE: PREFIX NO.	EFFECTIVE DATE	NEXT REVIEW DATE
PHS 111	Fall 2004	Fall 2005

TITLE:	CREDITS	CONTACTS		
		CLASS	LAB	TOTAL
Conceptual Physics I	3	3	0	3

PREREQUISITES: MAT 155 with grade of "C" or better.

DESCRIPTION: This course is an introduction to the mechanical concepts of distance, time, mass, force, energy and power.

Studies include simple machines, vectors, power trains, fluid mechanics, heat and electricity.

TEXTBOOK(S) OR ALTERNATIVE: Physics for Career Education by Ewen/Nelson/Schruter; seventh edition. 2002.

MATERIALS (specifying those to be purchased by student): Students will receive a course outline. Students will provide textbook and workbook, paper, pencils, and a scientific calculator.

COLLATERAL READING: N/A

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 definition of academic dishonesty and an outline of disciplinary action that may result therefrom.

Attendance: Students are expected to attend all scheduled classes, however, up to 10 hours of absence are allowed for unavoidable hardships such as illness or car trouble. A student missing more than 10 hours of class for any reason will be dropped from the course for excessive absences. A grade of "W" will be assigned if a student drops, or is dropped from a class prior to mid-term. After mid-term, a grade of "F" will be assigned unless there are extenuating circumstances and the student is passing the course at the time of withdrawal.

Tardies: A student is considered tardy if he or she arrives for class after the roll has been taken. Three tardies constitute one hour of absence.

Assigned Work: If a student is absent the day an assignment is due (test and/or homework), the completed work should be turned in the first day back in class. Make up test will be placed in the Success Center.

Classroom Etiquette: An integral part of an education is developing a sense of integrity and responsibility. In the classroom, as on the job or in your home, exhibiting appropriate behavior reflects on your maturity. Arriving on time to class, being prepared, and

considerate of others as they are talking has a positive effect on others. Please be considerate.

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 Catalog, Page 13).

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

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

TENTATIVE CLASS SCHEDULE

WEEK	DESCRIPTION
1	Introduction Chapter 1: Measurements and the Metric System
2	Quiz 1: Chapter 1 Chapter 2: Problem Solving
3	Quiz 2: Chapter 2 Chapter 3: Vectors
4	Quiz 3: Chapter 3 Chapter 4: Motion
5	Quiz 4: Chapter 4 Chapter 5: Force
6	Quiz 5: Chapter 5 Chapter 6: Work and Energy
7	Quiz 6: Chapter 6 **MIDTERM REVIEW** Chapter 7: Rotational Motion
8	**MIDTERM (SUCCESS CENTER)**
9	Quiz 7: Chapter 7 Chapter 8: Simple Machines
10	Quiz 8: Chapter 8 Chapter 9: Matter Project Information
11	Quiz 9: Chapter 9 Chapter 10: Fluids
12	Quiz 10: Chapter 10 Chapter 11: Temperature and Heat Transfer

13	Quiz 11: Chapter 11 Chapter 12: Properties of Gasses
14	Quiz 12: Chapter 12 Exam Review Chapters 7 – 12
15	Presentation of Projects
	EXAM

OBJECTIVES OF COURSE: The student will:

1. Know and use the basic measurement units, both English and metric and be able to convert measurements among systems.
2. Perform calculations involving: Hydraulics and pressures, temperature effects, gases and change of state, forces, work and energy, simple machines, matter and electricity.
3. Demonstrate an understanding of the basic principles governing the above topics.

INSTRUCTIONAL METHODS TO COMPLETE OBJECTIVES: Classroom lectures, demonstrations, textbook assignments, and class discussions.

EVALUATIVE METHODS TO APPRAISE OBJECTIVES:

10 to 12 Quiz grades	50 points
Team/individual project	25 points
Midterm exam	12.5 points
Final exam	12.5 points

Quizzes: Each week a 5 to 10 question quiz will be given on the previous week's work. The quizzes will be given in class. If you miss a class, then the make up quiz will be placed in the Success Center. Please go to the Success Center and take the test before the next class meeting.

Project: A project entitled: "How Physics is used in Everyday Life" will be required of all students. The project requires three components; a model, a written and an oral presentation.

Exams: A midterm and final exam will be given. Each exam will be a cumulative test on the material covered during that half of the semester. The midterm exam will be given in the Success Center. The final exam will be given in the classroom.

GRADING SCALE:

A = 90 - 100
B = 80 - 89
C = 70 - 79
D = 60 - 69
F = Below 60