

**NORTHEASTERN TECHNICAL COLLEGE
COURSE OUTLINE**

COURSE: EEM	PREFIX NO. 275	EFFECTIVE DATE SUMMER 2007	NEXT REVIEW DATE SUMMER 2008		
TITLE: TECHNICAL TROUBLESHOOTING		CREDITS 3.0	CONTACTS		
			CLASS	LAB	TOTAL
			2.0	3.0	3.0

PREREQUISITES: EEM 117 or EEM 115 and EEM 116

DESCRIPTION: This course consists of a systematic approach to troubleshooting. Techniques used to analyze proper circuit operation and malfunctions are studied.

TEXTBOOK(S) OR ALTERNATIVE: Troubleshooting Electrical/Electronic Systems by Mazur, and Workbook: Troubleshooting Electrical/Electronic Systems by Mazur, 2nd ed.

MATERIALS (specifying those to be purchased by student): Materials provided are course outline and lab equipment. Students will provide paper, pencils, and a scientific calculator. Students may bring in personal electronic equipment for testing and troubleshooting. This personal equipment will be the sole responsibility of the student.

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.

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 "WF" is 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 1 hour of absence.

Assigned Work: If a student is absent the day an assignment (test and/or homework) is due; he/she is required to complete the work on the first day back in class.

Classroom Etiquette: An integral part of an education is developing a sense of integrity and responsibility not only toward ourselves but also toward others. 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.

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.

Then instructors are required to dismiss students without ID from class. The student may get his/her ID (or a new one from 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 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. (College Catalog)

RESOURCES (A-V, persons, tools/equipment): Lab test instruments will be used to troubleshoot and repair when possible equipment found in the lab as well as students personal projects.

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

Under the direction of the instructor students will construct and/or troubleshoot technical projects. With instructor permission students may bring in electrical or electronic projects to troubleshoot.

OBJECTIVES OF COURSE: Students will be able to:

1. Develop good construction and troubleshooting techniques.
2. Promote good work habits such as safety and work ethics.
3. Use the proper tool in the proper way
4. Work in teams

INSTRUCTIONAL METHODS TO COMPLETE OBJECTIVES: Class decisions, demonstrations, and audiovisuals will be used to cover certain topics.

EVALUATIVE METHODS TO APPRAISE OBJECTIVES: Grades will be given according to lab performance and scores on written tests. Lab performance will be evaluated using the following criteria:

1. Use of proper safety procedures.

2. Demonstration of work ethics such as being on time, following class procedures, attitude toward accomplishing the task, and etc.
3. Ability to work with little supervision.
4. Use good reasoning skills to accomplish task.
5. Accomplishment of task.
6. Ability to work in teams.

GRADING SCALE:

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