JEFFERSON COLLEGE
COURSE SYLLABUS

ETI225
INTRODUCTION TO THE NATIONAL ELECTRICAL CODE

3 Credit Hours

Prepared by:
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I. CATALOGUE DESCRIPTION

A. Pre-requisite: ETI236 Industrial Control, or Instructor Approval, and Reading Proficiency

B. 3 Credit Hour Award

C. Introduction to the National Electrical Code is a course designed to provide the students with a working knowledge of the National Electrical Code (NEC) and some hands-on experience in industrial electrical wiring to NEC standards. This course also covers installation and maintenance of solid state devices and controls, DC and three phase motors, and motor controllers. (S)

II. EXPECTED LEARNING OUTCOMES/CORRESPONDING ASSESSMENT MEASURES

| State the purpose and history of the National Electrical Code, and its application in the use of electricity. | Exams  
Quizzes  
Homework |
|---|---|
| Demonstrate the ability to match code definitions within the National Electrical Code to various situations found in the workplace. | Exams  
Quizzes  
Homework |
| Demonstrate the ability to reference the proper codes to answer questions related to the five sections of the National Electrical Code book. | Exams  
Quizzes  
Homework |
| Demonstrate the ability to perform proper electrical calculations to determine if the standards of the National Electrical Code are being followed correctly. | Exams  
Quizzes  
Homework |
| Demonstrate the ability to access information regarding electrical code changes, pending changes, permit status, and electrical news updates using online resources. | Exams  
Quizzes  
Homework |

III. OUTLINE OF TOPICS

   1. Introduction to the National Electrical Code
   2. Definitions
   3. Boxes and enclosures
   4. Cables
   5. Raceway and conductors
B. One Family Dwellings
   1. General provisions
   2. Specific provisions
   3. Load calculations
   4. Services and electrical equipment

C. Multifamily Dwellings
   1. Comprehensive provisions
   2. Load calculations

D. Commercial Locations
   1. General provisions
   2. Non-dwelling load calculations
   3. Services, feeders, and equipment

E. Special Occupancies, Areas, and Equipment
   1. Hazardous locations
   2. Healthcare
   3. Industrial locations
   4. Special occupancies
   5. Specific equipment

IV. METHOD(S) OF INSTRUCTION

   A. Lecture
   B. Textbook Reading
   C. Demonstrations
   D. Hands on Activities
   E. Research Activities

V. REQUIRED TEXTBOOK(S)


VI. REQUIRED MATERIALS

   A. Paper
   B. Pens
   C. Pencils
VII. SUPPLEMENTAL REFERENCES

None

VIII. METHOD OF EVALUATION

A. Homework 60%
B. Quizzes 20%
C. Exams 20%

A = 90-100%
B = 80-90%
C = 70-80%
D = 60-70%
F = Below 60%

IX. ADA AA STATEMENT

Any student requiring special accommodations should inform the instructor and the Coordinator of Disability Support Services (Library; phone 636-797-3169).

X. ACADEMIC HONESTY STATEMENT

All students are responsible for complying with campus policies as stated in the Student Handbook (see College Website http://www.jeffco.edu).

XI. ATTENDANCE STATEMENT

Regular and punctual attendance is expected of all students. Any one of these four options may result in the student being removed from the class and an administrative withdrawal being processed: (1) Student fails to begin class; (2) Student ceases participation for at least two consecutive weeks; (3) Student misses 15 percent or more of the coursework; and/or (4) Student misses 15 percent or more of the course as defined by the instructor. Students earn their financial aid by regularly attending and actively participating in their coursework. If a student does not actively participate, he/she may have to return financial aid funds. Consult the College Catalog or a Student Financial Services representative for more details.
XII. OUTSIDE OF CLASS ACADEMICALLY RELATED ACTIVITIES

The U.S. Department of Education mandates that students be made aware of expectations regarding coursework to be completed outside the classroom. Students are expected to spend substantial time outside of class meetings engaging in academically related activities such as reading, studying, and completing assignments. Specifically, time spent on academically related activities outside of class combined with time spent in class meetings is expected to be a minimum of 37.5 hours over the duration of the term for each credit hour.