

#### ARCHITECTURE, CONSTRUCTION & MANUFACTURING TECHNOLOGIES DIVISION

#### INDUSTRIAL ELECTRICITY DEPARTMENT

## **COURSE SYLLABUS**

COURSE NUMBER: **ELPT 1325**COURSE RECORD NUMBER: **33113**COURSE TITLE: **National Electrical Code I** 

CREDITS: 3 (2 lecture, 3 lab)

Instructor: Don Wood; Ph. 281-931-0562; Email: donald.wood1@hccs.edu

# **COURSE DESCRIPTION**

An introductory study of the National Electrical Code (NEC) for those employed in fields requiring knowledge of the Code. Emphasis on wiring design, protection, methods, and materials; equipment for general use; and basic calculations. The course is designed to familiarize the student with Code contents and organization, terminology, definitions, chapters, sections, Fine Print Notes and table usage.

## **COURSE POLICIES**

#### **Attendance**

Students are expected to attend classes regularly, and to be on time for every class period. Students can be dropped from a class due to excessive absences. Excessive tardiness may be considered absences. Students are responsible for subjects, assignments, and projects covered during their absences. Consult the **Student Handbook** for more details or visit <a href="http://www.hccs.edu/hccs/current-students/student-handbook">http://www.hccs.edu/hccs/current-students/student-handbook</a>

### **Academic Honesty**

Scholastic dishonesty is treated with the utmost seriousness by the instructor and the College. Academic dishonesty includes, but it is not limited to the willful attempt to misrepresent one's work, cheat, plagiarize, or impede other students' scholastic progress. Consult the **Student Handbook** for more details.

#### **Students with Disabilities**

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please meet with a campus Abilities Counselor as soon as possible in order to establish reasonable accommodations. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Ability Services. It is the policy and practice of HCC to create inclusive and accessible learning environments consistent with federal and state law. For more information, please go to <a href="http://www.hccs.edu/district/students/disability-services/">http://www.hccs.edu/district/students/disability-services/</a>. Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the **Disability Support Services Office** at his / her respective college at the beginning of each semester. Faculties are authorized to provide only the accommodations requested by the **Disability Support Services Office**. For Central College, call 713 – 718 – 6164.

# **Cell Phones**

All cell phones must be muted, set to vibrate, or turned off during class. Cell phone activity during class is deemed disruptive to the academic process and will not be tolerated. If you need to make or receive an emergency call, please leave the classroom.

### **Calculators**

If the course allows the use of a calculator during class, lab projects, and exams, the student is responsible to bring his/her calculator. Cell phones are not calculators, and are not allowed to be used for that purpose during class, tests, or exams.

#### Student ID

Students are required to obtain a Student ID. For additional information, consult the Student Handbook.

# **Parking Rules and Regulations**

Students are required to follow HCC's regulations regarding parking and permits. For additional information, visit <a href="http://www.hccs.edu/hccs/about-hcc/police/parking/parking-rules-and-regulations">http://www.hccs.edu/hccs/about-hcc/police/parking/parking-rules-and-regulations</a>

# **Books, Tools and Supplies**

Students are required to purchase and bring to class the required textbooks, tools, notebooks, supplies, and writing instruments as required by the instructor.

**Textbooks:** *National Electrical Code*, 2017 Edition, by National Fire Protection Association (NFPA), Publication, NFPA-70, Quincy, Massachusetts 02169-7471, ISBN:

ISBN: 978-145591277-3 (SB Print)
ISBN: 978-145591278-0 (LL Print)
ISBN: 978-145591279-7 (Spiral Print)
ISBN: 978-145591280-3 (PDF)

The NEC does not provide the **quick access code tabs** with the code book. It is a separate Item, but you will need the tabs to access the Articles and Sections quickly on time-limited exams. These tabs can be obtained from a number of sources at different prices. They are called Color Coded EZ Tabs for the 2017 National Electrical Code. To see a sample, 1 source is at <a href="https://www.amazon.com/Color-Coded-Tabs-National-Electrical/dp/133740201X/ref=sr\_1\_fkmr0\_1?s=books&ie=UTF8&qid=1506458390&sr=1-1-fkmr0&keywords=Color+Coded+EZ+Tabs+for+the+2017+National+Electrical+Code+2nd+Editio

Mike Holt's Illustrated Guide to Understanding the National Electrical Code, Vol. 1 (Articles 90 – 480), by Mike Holt, Mike Holt Enterprises, Inc., 888.NEC.CODE (632.2633), <a href="https://www.MikeHolt.com">www.MikeHolt.com</a>. ISBM: 9780986353451

Calculator (see HCC policy on Calculators in the section above).

**Flash Drive** (optional: buy 2 – 1 for saving data and 1 for a back-up incase the 1 of the Flash Drive go out or stop working or you lose one).

#### **Dress Code**

Dress code must be appropriate for the class. Students must dress in a way that clothing and accessories do not compromise their safety, and the safety of others. Proper foot wear is required in all laboratories. Absolutely no sandals or other footwear that exposes the feet will be allowed.

#### **Classroom & Laboratory Conduct**

Proper behavior is expected in all classes and laboratories. Foul language and horseplay are not allowed. Making or receiving cell phone calls during class are not allowed. Sleeping in class is not allowed.

#### **Course Withdrawal**

It is the responsibility of the student to officially withdraw from a course before the official withdrawal deadline. A student who does not withdraw from a course by the deadline will receive an "F" as the final grade. Also note that under Section 51.907 of the Texas Education Code, an institution of higher education may not allow a student to drop more than six courses.

HCC is committed to provide a learning and working environment that is free from discrimination on the basis of sex which includes all forms of sexual misconduct. Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits

discrimination on the basis of sex-including pregnancy and parental status-in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to: David Cross, Director EEO/Compliance, Office of Institutional Equity & Diversity, 3100 Main, (713) 718-8271, Houston, TX 77266-7517 or Houston, TX 77266-7517 or Institutional.Equity@hccs.edu.

# **COURSE TIMELINE, CONTENTS & ACTIVITIES**

## **WEEK # 1: COURSE RULES AND ORIENTATION**

- Introduction
- Purpose of the course
- Overview of course syllabus
- Course policies
- Required materials, textbook(s), supplies, and resources (if applicable)
- Disability Support Services
- · Registration, schedules, receipts, and student ID
- Importance of updating and maintaining student data (Name, Address, ID #, phone numbers, emails)
- · Parking rules and regulations
- Classroom and laboratory safety
- Course withdrawal, *Official Day of Record*, and last day for withdrawal
- Course tests, quizzes, exams, and assignments
- Course grading policies
- Instructor information
- Campus orientation
- Article 90 Introduction to the National Electrical Code

WEEK # 2: Article 90 – Introduction to the National Electrical Code

WEEK # 3: Article 110 – Requirements for Electrical Installation

WEEK # 4: Article 110 – Requirements for Electrical Installation

WEEK # 5: Articles 200 - 240 - Wiring and Protection

WEEK # 6: Articles 250 – 285 – Wiring and Protection

WEEK # 7: Articles 300 - 314 - Wiring Methods and Materials

WEEK # 8: Articles 320 - 350 - Wiring Methods and Materials

WEEK # 9: Articles 352 – 362 – Wiring Methods and Materials

WEEK #10: Articles 376 - 392 - Wiring Methods and Materials

WEEK #11: Articles 400 - 411 - Equipment and General Use

WEEK #12: Articles 422 – 440 – Equipment and General Use

WEEK #13: Articles 445 - 480 - Equipment and General Use

WEEK #14: Final Exam