



**EEM 140
NATIONAL ELECTRICAL CODE**

COURSE DESCRIPTION

This course is a study of the National Electrical Code and is based on the latest codes as published by the National Fire Protection Association.

3 Credits (Lec. 3 Lab. 0)

Prerequisite: Instructor approval.

COURSE FOCUS

This course will focus on National Electrical Codes as they relate to residential construction.

TEXT AND REFERENCES

National Electric Code 2014 NFPA 70, ISBN-13: 978-1455906727 ISBN-10: 1455906727

COURSE GOALS

The following list of course goals will be addressed in the course. These goals are directly related to the performance objectives. (*designates a CRUCIAL goal):

1. identify Chapter 1 as the General chapter
2. determine that Article 90 contains introductory information
3. organized installation document
4. recognize Chapter 9 are tables and annexes
5. recognize Chapter 8 stands alone
6. recognize Chapters 5,6,7 are Special chapters
7. identify Article 90 as the Introductory chapter
8. identify Chapter 4 as the Use chapter
9. subdivide chapters by articles
10. identify Chapter 2 as the Plan chapter
11. subdivide articles by parts

12. understand the method of articles within the chapters
13. recognize ten major subdivisions
14. recognize that the NEC is a ANSI consensus
15. recognize the importance of being extremely familiar with the NEC table of contents
16. organize NEC outline is in section 90.3
17. identify technical committee
18. identify code making panels
19. explain proposal and comment process
20. explain how you can take part in the NEC revision process
21. explain consensus standard
22. identify Chapter 3 as the Build chapter
23. make notes where appropriate
24. analyze tables and annexes in chapter 9
25. apply chapter 1 through 7 only if referenced in chapter 8
26. sketch simple wiring diagram
27. recall articles in chapter 2
28. know Chapter 4 is the 400 series
29. know Chapter 3 is the 300 series
30. know Chapter 2 is the 200 series
31. know Chapter 1 is the 100 series
32. outline of the NEC start with articles and parts
33. review Article 90 sections
34. prepare short presentation
35. underline key word and phrases of the NEC
36. Highlight articles and parts
37. mark up your code book
38. implement codeology fundamentals
39. identify four basic building blocks
40. identify clues and key terms
41. locate single article terms
42. define terms in article 100
43. subdivide section into three levels
44. subdivide the NEC by chapters
45. describe the general type of information and requirements contain in chapter 1

STUDENT CONTRIBUTION

The student is expected to be prepared for class and to be in class on time. Cell phones are not allowed to be used in the classroom. This includes texting. All electronic devices including cell phones, pagers, computers, Ipods, Ipads must be turned off during class.

COURSE EVALUATION

The grading scale is as follows:

90 - 100 = A

80 - 89 = B

70 - 79 = C

60 - 69 = D

Below 60 = F

COURSE SCHEDULE

The class meets for 1 lecture/presentation hours per week for a total of 16 weeks during fall and spring semesters.

Approved by: *Kenneth Flick* Developed/Revised: 1/20/2015
Ken Flick, Division Dean for Business/Industrial Division

ADA STATEMENT

The Technical College of the Lowcountry provides access, equal opportunity and reasonable accommodation in its services, programs, activities, education and employment for individuals with disabilities. To request disability accommodation, contact the counselor for students with disabilities at (843) 525-8228 during the first ten business days of the academic term.

ACADEMIC MISCONDUCT

There is no tolerance at TCL for academic dishonesty and misconduct. The College expects all students to conduct themselves with dignity and to maintain high standards of responsible citizenship.

It is the student's responsibility to address any questions regarding what might constitute academic misconduct to the course instructor for further clarification.

The College adheres to the Student Code for the South Carolina Technical College System. Copies of the Student Code and Grievance Procedure are provided in the *TCL Student Handbook*, the Division Office, and the Learning Resources Center.

ATTENDANCE

The College's statement of policy indicates that students must attend ninety percent of total class hours or they will be in violation of the attendance policy.

- Students not physically attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING.
- Students taking an online/internet class must sign in **and** communicate with the instructor within the first ten calendar days from the start of the semester to indicate attendance in the class. Students not attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING.
- Reinstatement requires the signature of the division dean.

In the event it becomes necessary for a student to withdraw from the course **OR if a student stops attending class, it is the student's responsibility to initiate and complete the necessary paperwork.** Withdrawing from class may have consequences associated with financial aid and time to completion.

When a student exceeds the allowed absences, the student is in violation of the attendance policy. The instructor **MUST** withdraw the student with a grade of "W", "WP", or "WF" depending on the date the student exceeded the allowed absences and the student's progress up to the last date of attendance

or

under extenuating circumstances and at the discretion of the faculty member teaching the class, allow the student to continue in the class and make-up the work. This exception must be documented at the time the allowed absences are exceeded.

Absences are counted from the first day of class. There are no "excused" absences. All absences are counted, regardless of the reason for the absence.

- A student must take the final exam or be excused from the final exam in order to earn a non-withdrawal grade.

A copy of TCL's STATEMENT OF POLICY NUMBER: 3-1-307 CLASS ATTENDANCE (WITHDRAWAL) is on file in the Division Office and in the Learning Resources Center.

HAZARDOUS WEATHER

In case weather conditions are so severe that operation of the College may clearly pose a hardship on students and staff traveling to the College, notification of closing will be made through the following radio and television stations: WYKZ 98.7, WGCO 98.3, WGZO 103.1, WFXH 106.1, WWVW 106.9, WLOW 107.9, WGZR 104.9, WFXH 1130 AM, WLVH 101.1, WSOK 1230 AM, WAEV 97.3, WTOC TV, WTGS TV, WJWJ TV, and WSAV TV. Students, faculty and staff are highly encouraged to opt in to the Emergency Text Message Alert System. www.tcl.edu/textalert.asp

EMERGENCY TEXT MESSAGE ALERT

Students, faculty and staff are highly encouraged to opt in to the Emergency Text Message Alert System. Participants receive immediate notification of emergency events and weather cancelations via text messaging on their cell phones. Participants can also opt in to receive non-emergency news and announcements. Go to www.tcl.edu. On the homepage, click on "emergency TextAlert at TCL" and fill out the form or go to www.tcl.edu/textalert.asp

SYLLABUS SAFETY ADDENDUM

Purpose

The purpose of this safety addendum is to provide each student with safety guidelines during an incident, emergency, or disaster at TCL. In addition, it provides students guidelines for lockdown procedures, evacuation procedures, and active shooter.

Definition

An incident is any event, potential or actual, that may impact normal operations but has no immediate health or life threatening consideration or serious effect on the overall functional capacity of the College. An event of this nature should be reported to the Office of the Vice President for Administrative Services. Also notify the off-site campus administrator if applicable.

An emergency is any incident, potential or actual, which may endanger life or health or which affects an entire building or buildings, and will disrupt the overall operations of the College. Outside emergency services will probably be required, as well as major efforts from campus support services. Major policy considerations and decisions will usually be required from the college administration during times of crises. An emergency should be reported immediately by directly using **911** if life or health/injury considerations exist and then to the Office of the President or Vice President for Administrative Services as quickly as possible. Also notify the off-site campus administrator if applicable.

A disaster is any event or occurrence that has taken place and has seriously impaired or halted the operations of the College. In some cases, mass personnel casualties and severe property damage may be sustained. A coordinated effort of all campus-wide resources is required to effectively control the situation. Outside emergency services will be essential. In all cases of disaster, an Emergency Control Center will be activated, and the appropriate support and operational plans will be executed. The disaster should be immediately reported, first by calling **911** and then to the Office of the President or Vice President for Administrative Services. Also notify the off-site campus administrator if applicable.

Types of Emergencies

- Hurricane
- Tornado
- Fire
- Biochemical or Radiation Spill
- Explosion/Bomb
- Downed Aircraft (crash which directly impacts campus operations)
- Utility Failures
- Violent or criminal behavior
- Psychological Crisis

Procedures

Active Shooter

Run/hide/fight (<http://www.fbi.gov/about-us/cirg/active-shooter-and-mass-casualty-incidents/run-hide-fight-video>)

Building Evacuation

1. Building evacuations occur when an alarm sounds and/or upon notification by Security or the Emergency Director.
2. When the building evacuation alarm is activated during an emergency, individuals should exit according to the building evacuation plan and alert others to do the same.
3. Once outside, individuals should proceed to a clear area that is at least 500 feet away from the affected building. Streets, fire lanes, hydrant areas and walkways should be kept clear for emergency vehicles and personnel.
4. Individuals should not return to an evacuated building unless told to do so by Security or the Emergency Director.
5. Individuals should assist persons with disabilities in exiting the building. Elevators are reserved for disabled persons

Campus Evacuation

1. A uniformed Security Guard, the Emergency Director, or an Emergency Resource Team member will announce evacuation of all or part of the campus grounds.
2. All persons (students and staff) are to immediately vacate the campus, or in the case of a partial evacuation relocate to another part of the campus grounds as directed.

Lockdown

1. Clear the halls
2. Report to the nearest classroom/office
3. Assist those needing special assistance
4. Ensure classroom/office doors are closed and locked
5. Turn off lights
6. Stay away from doors and windows (out of the line of sight)
7. BE QUIET and follow instructor's directions
8. Silence cell phones
9. Wait for the "All Clear" before leaving

Developed/Revised: January 8, 2015