



ELTR 1080 Commercial Wiring 1 COURSE SYLLABUS Spring Semester 2016

Semester: Spring 2016

Course Title: Commercial Wiring 1

Course Number: ELTR 1080

Credit Hours/ Minutes: 5 / 4500

Class Location: Building 6 Lab 6102

Class Meets: 9:30AM- 12:10PM MTWR

CRN: 40269

Instructor: Tony Criswell

Office Hours: 8-8:30AM Monday- Thursday and
1-3:30PM Monday and Tuesday

Office Location: Building 6 Lab 6102

Email Address: tcriswell@southeasterntech.edu

Phone: 478-289-2235

Tutoring Hours: 1-2PM MTWR

This course is taught in a hybrid format. Hybrid classes require students to complete a portion of the required contact hours traditionally by attending classes on campus while completing the remaining portion online at the student's convenience with respect to the instructor's requirements.

REQUIRED TEXT:

- **NEC 2014 Code Spiral Bound**, Published by NFPA, Distributed by Builders Book, ISBN: 9781455906734
- **Commercial Wiring Trainee Guide** by NCCER, Pearson Publishers ISBN 978-1-269-83001-0

REQUIRED SUPPLIES & SOFTWARE: Tools and Safety Glasses; 2GB or higher USB Jump Drive

Note: Although students can use their smart phones and tablets to access the online portion of their course(s), exams, discussions, assignments, and other graded activities should be performed on a personal computer. Neither ANGEL nor GVTC provide technical support for issues relating to the use of a smart phone or tablet so students are advised to not rely on these devices to complete the online portion of the course

COURSE DESCRIPTION: Introduces commercial wiring practices and procedures

MAJOR COURSE COMPETENCIES: Topics include: industrial safety procedures, the National Electrical Code, principles of grounding and bonding, commercial services, three-phase power systems, and electric motor fundamentals.

PREREQUISITE(S): None

COREQUISITE(S): None

COURSE OUTLINE:

1. Industrial Safety Procedures
2. National Electric Code
3. Principles of Grounding and Bonding
4. Commercial Services
5. Three-Phase Power Systems
6. Electric Motor Fundamentals

GENERAL EDUCATION CORE COMPETENCIES: STC has identified the following general education core competencies that graduates will attain:

- A. The ability to utilize standard written English.
- B. The ability to solve practical mathematical problems.
- C. The ability to read, analyze, and interpret information

All students pursuing a degree, a diploma, or a Technical Certificate of Credit with a General Education component will be required to pass the General Education Competency Exams prior to graduation.

STUDENT REQUIREMENTS (Hybrid): Class attendance is a very important aspect of a student's success in this course. Responsibility for class attendance rests with the student. Regular and punctual attendance at all scheduled classes is expected. Students are expected to complete all work required by the instructor. Unannounced quizzes/assignments may be given. Students that miss an unannounced quiz or assignment will receive a grade of 0. Students are expected to complete all work shown on the attached assignment sheet. Students are also expected to complete all tests and comprehensive problems on the dates specified on the attached calendar. Students are responsible for policies and procedures included in the *STC Catalog*. **Electrical Systems Technology program students must earn a minimum grade of C in this course.**

ATTENDANCE GUIDELINES: Class attendance is a very important aspect of a student's success. Being absent from class prevents students from receiving the full benefit of a course and also interrupts the learning process. Southeastern Technical College considers both tardiness and leaving early as types of absenteeism. Responsibility for class attendance rests with the student. Regular and punctual attendance at all scheduled classes is required for student success. Students will be expected to complete all work required by the instructor as described in the individual course syllabus.

Instructors have the right to give unannounced quizzes/assignments. Students who miss an unannounced quiz or assignment will receive a grade of 0. Students who stop attending class, but do not formally withdraw, may receive a grade of F and face financial aid repercussions in upcoming semesters.

Instructors are responsible for determining whether missed work may be made up and the content and dates for makeup work is at the discretion of the instructor.

WITHDRAWAL PROCEDURE: Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% portion of the semester (date will be posted on the school calendar) must speak with a Career Counselor in Student Affairs and complete a Student Withdrawal Form. A grade of "W" is assigned when the student completes the withdrawal form from the course.

Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of 'F' being assigned.

After the 65% portion of the semester, the student will receive a grade for the course. (Please note: A zero will be given for all missed assignments.)

There is no refund for partial reduction of hours. Withdrawals may affect students' eligibility for financial aid for the current semester and in the future, so a student must also speak with a representative of the Financial Aid Office to determine any financial penalties that may be assessed due to the withdrawal. All grades, including grades of 'W', will count in attempted hour calculations for the purpose of Financial Aid.

Remember - Informing your instructor that you will not return to his/her course does not satisfy the approved withdrawal procedure outlined above.

SPECIFIC ABSENCES: Provisions for Instructional Time missed because of documented absences due to jury duty, military duty, court duty, or required job training will be made at the discretion of the instructor.

SPECIAL NEEDS: Students with disabilities who believe that they may need accommodations in this class based on the impact of a disability are encouraged to contact Jan Brantley, Room 1208 Swainsboro Campus, 478-289-2274, or Helen Thomas, Room 108 Vidalia Campus, 912-538-3126, to coordinate reasonable accommodations.

PREGNANCY

Southeastern Technical College does not discriminate on the basis of pregnancy. However, we can offer accommodations to students who are pregnant that need special consideration to successfully complete the course. If you think you will need accommodations due to pregnancy, please advise me and make appropriate arrangements with the Special Needs Office. Swainsboro Campus: Jan Brantley, Room 1208, (478) 289-2274 -- Vidalia Campus: Helen Thomas, Room 108, (912) 538-3126.

MAKEUP GUIDELINES (Tests, quizzes, homework, projects, etc...): Extenuating circumstances are determined at the instructor's discretion. Unless otherwise scheduled with the instructor, it is expected that the test will be taken the next day, scheduled outside of regular class time. Failure to follow this procedure will result in a grade of zero.

Assignment due dates are listed on the attached lesson schedule. Students are expected to have the assignment completed at the beginning of class on the date that it is due. It is within the instructor's discretion to accept or reject late assignments. Any late assignments accepted will be subject to a ten point penalty each day the assignment is late. After three class meetings, no late assignments will be accepted; a zero will be recorded.

Unannounced quizzes are subject to be given on any day. A grade of zero will be assigned for any quizzes missed. There will be no makeup of quizzes. Any zeros recorded will be included in the final score calculation

ACADEMIC DISHONESTY POLICY: The STC Academic Dishonesty Policy states *All forms of academic dishonesty, including but not limited to cheating on tests, plagiarism, collusion, and falsification of information, will call for discipline.* The policy can also be found in the *STC Catalog and Student Handbook.*

Procedure for Academic Misconduct

The procedure for dealing with academic misconduct and dishonesty is as follows:

--First Offense--

Student will be assigned a grade of "0" for the test or assignment. Instructor keeps a record in course/program files and notes as first offense. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus. The Registrar will input the incident into Banner for tracking purposes.

--Second Offense--

Student is given a grade of "WF" for the course in which offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Registrar will input the incident into Banner for tracking purposes.

--Third Offense--

Student is given a grade of "WF" for the course in which the offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Vice President for Student Affairs, or designee, will notify the student of suspension from college for a specified period of time. The Registrar will input the incident into Banner for tracking purposes.

STATEMENT OF NON-DISCRIMINATION: Southeastern Technical College does not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, disabled veteran, veteran of Vietnam Era or citizenship status, (except in those special circumstances permitted or mandated by law). This school is in compliance with Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, or national origin; with the provisions of Title IX of the Educational Amendments of 1972, which prohibits discrimination on the basis of gender; with the provisions of Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of handicap; and with the American with Disabilities Act (ADA).

GRIEVANCE PROCEDURES: Grievance procedures can be found in the Catalog and Handbook located on STC's website.

ACCESS TO TECHNOLOGY: Students can now access Blackboard, Remote Lab Access, Student Email, Library Databases (Galileo), and BannerWeb via the mySTC portal or by clicking the Current Students link on the STC website at www.southeasterntech.edu.

GRADING POLICY

Module Test	40%
Review Quizzes	10%
Performance Evaluations/Labs	<u>50%</u>
Total	100%

GRADING SCALE

A: 90-100
B: 80-89
C: 70-79
D: 60-69
F: 0-59

TCSG GUARANTEE/WARRANTY STATEMENT: *The*

Technical College System of Georgia guarantees employers that graduates of State Technical Colleges shall possess skills and knowledge as prescribed by State Curriculum Standards. Should any graduate employee within two years of graduation be deemed lacking in said skills, that student shall be retrained in any State Technical College at no charge for instructional costs to either the student or the employer.

**ELTR 1080 COMMERCIAL WIRING 1 LESSON PLAN
SPRING SEMESTER 2016**

DATES	Module	OBJECTIVES	ASSIGNMENTS	Comp Area Gen. Ed Comp
January 7	Spring Semester Begins			
March 16 Begin March 22 End All Items Due	Grounding and Bonding-Module 26209-14	<ul style="list-style-type: none"> Explain the purpose of grounding and bonding and the scope of NEC Article 250 Define the National Electrical Code® requirements related to bonding and grounding 	<ul style="list-style-type: none"> Read Module 26209-14 of the Electrical Trainee Guide Look at the PowerPoint's in Blackboard Answer the module review questions in Module 26209-14 Complete Module 26209-14 Performance Profile Sheet Take the Module 26209-14Exam 	1,2,3 A,B,C
March 23 Begin April 5 End All Items Due	Practical Applications for Lighting-Module 26303-14	<ul style="list-style-type: none"> Explain how the lighting terms lumen, candlepower, and foot-candle relate to one another. Classify lighting fixtures by type and application. Identify the general lighting pattern produced by each type of fixture. 	<ul style="list-style-type: none"> Read Module 26303-14 of the Electrical Trainee Guide Look at the PowerPoint's in Blackboard Answer the module review questions in Module 26303-14 Complete Module 26303-14 Performance Profile Sheet Take the Module 26303-14 Exam 	1,2,5 A,B,C
April 5 Begin April 12 End All Items Due	Transformers-Module 26307-14	<ul style="list-style-type: none"> Describe transformer operation. Explain the principle of mutual induction. Describe the operating characteristics of various types of transformers. 	<ul style="list-style-type: none"> Read Module 26307-14 of the Electrical Trainee Guide Look at the PowerPoint's in Blackboard Answer the module review questions in Module 26307-14 Take the Module 26307-14Exam 	1,2,3,5 A,B,C
April 12 Begin April 19 End All Items Due	Commercial Electrical Services-Module 26308-14	<ul style="list-style-type: none"> Describe various types of electric services for commercial and industrial installations. Read electrical diagrams describing service installations. 4. Explain the role of the <i>National Electrical Code®</i> in service installations 	<ul style="list-style-type: none"> Read Module 26308-14 of the Electrical Trainee Guide Look at the PowerPoint's in Blackboard Answer the module review questions in Module 26308-14 Take the Module 26308-14Exam 	1,2,3,5 A,B,C
April 19 Begin April 25 End All Items Due	Motors: Theory and Application-Module 26202-14	<ul style="list-style-type: none"> Describe the various types of motor enclosures Explain how the direction of a three-phase motor is changed. Describe the methods for determining various motor connections 	<ul style="list-style-type: none"> Read Module 26202-14 of the Electrical Trainee Guide Look at the PowerPoint's in Blackboard. Answer the module review questions in Module 26202-14 Complete Module 26202-14 Performance Profile Sheet Take the Module 26202-14Exam 	1,2,6 A,B,C
April 26 Begin May 2 End All Items Due	Motor Calculations-Module 26309-14	<ul style="list-style-type: none"> Size branch circuits and feeders for electric motors. Size and select overcurrent protective devices for motors. Size and select overload relays for electric motors 	<ul style="list-style-type: none"> Read Module 26309-14 of the Electrical Trainee Guide Look at the PowerPoint's in Blackboard Answer the module review questions in Module 26309-14 Take the Module 26309-14Exam 	1,2,6 A,B,C
COURSE COMPETENCIES: <ol style="list-style-type: none"> Industrial Safety Procedures National Electric Code Principles of Grounding and Bonding Commercial Services Three-Phase Power Systems Electric Motor Fundamentals 			GENERAL EDUCATION CORE COMPETENCIES: <ol style="list-style-type: none"> The ability to utilize standard written English. The ability to solve practical mathematical problems. The ability to read, analyze, and interpret information. 	