



AIRC-1030 HVACR Electrical Fundamentals
COURSE SYLLABUS
Fall Semester 2023 -202412

COURSE INFORMATION

Credit Hours/Minutes: 4/4500
Campus/Class Location: Vidalia / Main Building Room 423
Class Meets: M/T/W/R 9:20-10:35 a.m.
Course Reference Number (CRN): 20026

INSTRUCTOR CONTACT INFORMATION

Instructor Name: Vince Scott
Office Location: Main Building Room 426
Office Hours: Call to Schedule
Email Address: [Vince Scott vscott@southeasterntech.edu](mailto:Vince.Scott@southeasterntech.edu)
Phone: 912-538-3146
Fax Number: 912-538-3156
Tutoring Hours (if applicable): By appointment

SOUTHEASTERN TECHNICAL COLLEGE'S (STC) CATALOG AND HANDBOOK

Students are responsible for all policies and procedures and all other information included in Southeastern Technical College's [Catalog and Handbook \(https://catalog.southeasterntech.edu/\)](https://catalog.southeasterntech.edu/).

REQUIRED TEXT

Electricity for HVACR by Joseph Moravek ISBN# 978-0-13-512534-2

REQUIRED SUPPLIES & SOFTWARE

Safety glasses notebook for taking notes, 3 ring binder for hand-outs, and pen or pencil to use in class every day. **NOTE: You must have textbook and notebook with pen or pencil with you each day for class.**

Students should not share login credentials with others and should change passwords periodically to maintain security.

SAFETY

Shop safety is of paramount importance. Unsafe practices of any kind will result in dismissal from class. Proper clothing must be worn at all times, NO open toe shoes, No baggy clothes. Baggy pants are unsafe to work in and showing your underwear is viewed as indecent exposure.

COURSE DESCRIPTION

This course provides an introduction to fundamental electrical concepts and theories as applied to the air conditioning industry. Topics include AC and DC theory, electric meters, electrical diagrams, distribution systems, electrical panels, voltage circuits, code requirements, and safety.

COURSE COMPETENCIES (PER KMS STANDARD)

1. Safety
2. AC and DC Theory
3. Electric Meters
4. Electrical Diagrams and Circuits
5. Electrical Distribution Systems

PREREQUISITE(S)

None

COURSE OUTLINE (PER KMS COURSE DESCRIPTION)

1. AC and DC theory
2. Electric meters
3. Electrical diagrams
4. Distribution systems
5. Electrical panels
6. Voltage circuits
7. Code requirements
8. Safety

GENERAL EDUCATION CORE COMPETENCIES

Southeastern Technical College has identified the following general education core competencies that graduates will attain:

1. The ability to utilize standard written English.
2. The ability to solve practical mathematical problems.
3. The ability to read, analyze, and interpret information

STUDENT REQUIREMENTS

Students are expected to complete all tests and comprehensive/Lab problems by the due dates. A ten point penalty will be assessed for each day a comprehensive problem is late. There are no makeup tests. Tests are made available for several days; therefore, there are no makeup tests. Students who miss a test will be assigned a grade of zero. Students are responsible for policies and procedures included in the *STC E-Catalog*.

ON CAMPUS (CA) 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" (Failing 0-59) 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.

Students will not be withdrawn by an instructor for attendance; however, all instructors will keep records of graded assignments and student participation in course activities. The completion dates of these activities will

be used to determine a student's last date of attendance in the event a student withdraws, stops attending, or receives an "F" in a course.

STUDENTS WITH DISABILITIES

Students with disabilities who believe that they may need accommodations in this class based on the impact of a disability are encouraged to contact the appropriate campus coordinator to request services.

Swainsboro Campus: [Emily Jarrell \(ejarrell@southeasterntech.edu\)](mailto:ejarrell@southeasterntech.edu), 478-289-2259, Building 1, Room 1210.

Vidalia Campus: [Helen Thomas hthomas@southeasterntech.edu](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 165.

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.

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 make arrangements with the appropriate campus coordinator.

Swainsboro Campus: [Emily Jarrell \(ejarrell@southeasterntech.edu\)](mailto:ejarrell@southeasterntech.edu), 478-289-2259, Building 1, Room 1210.

Vidalia Campus: [Helen Thomas hthomas@southeasterntech.edu](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 165.

It is strongly encouraged that requests for consideration be made **PRIOR** to delivery and early enough in the pregnancy to ensure that all the required documentation is secured before the absence occurs. Requests made after delivery **MAY NOT** be accommodated. The coordinator will contact your instructor to discuss accommodations when all required documentation has been received. The instructor will then discuss a plan with you to make up missed assignments.

WITHDRAWAL PROCEDURE

Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% point of the term in which student is enrolled (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" (Withdrawn) is assigned for the course(s) when the student completes the withdrawal form.

Important – Student-initiated withdrawals are not allowed after the 65% point. After the 65% point of the term in which the student is enrolled, the student has earned the right to a letter grade and will receive a grade for the course. Please note: Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of "F" (Failing 0-59) being assigned.

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

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. A grade of "W" will count in attempted hour calculations for the purpose of Financial Aid.

MAKEUP GUIDELINES (TESTS, QUIZZES, HOMEWORK, PROJECTS, ETC.)

(Tests, quizzes, homework, projects, etc...): If a student misses' assignments, a grade of zero will be assigned. **Only students with extenuating circumstances (who contact the instructor on the day of the test regarding their absence) will be allowed to take a makeup test, which will replace the zero.** 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.

ACADEMIC DISHONESTY POLICY

The Southeastern Technical College Academic Dishonesty Policy states that 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 Southeastern Technical College Catalog and Handbook.

PROCEDURE FOR ACADEMIC MISCONDUCT

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

1. 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.

2. Second Offense

Student is given a grade of "WF" (Withdrawn Failing) 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.

3. 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 third 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

As set forth in the student catalog, Southeastern Technical College does not discriminate on the basis of race, color, creed, national or ethnic origin, sex, religion, disability, age, political affiliation or belief, genetic information, veteran status, or citizenship status (except in those special circumstances permitted or mandated by law).

The following individuals have been designated to handle inquiries regarding the nondiscrimination policies:

American With Disabilities Act (ADA)/Section 504 - Equity- Title IX (Students) – Office of Civil Rights (OCR) Compliance Officer	Title VI - Title IX (Employees) – Equal Employment Opportunity Commission (EEOC) Officer
Helen Thomas, Special Needs Specialist Vidalia Campus	Melanie Walker, Director of Human Resources

American With Disabilities Act (ADA)/Section 504 - Equity- Title IX (Students) – Office of Civil Rights (OCR) Compliance Officer	Title VI - Title IX (Employees) – Equal Employment Opportunity Commission (EEOC) Officer
3001 East 1 st Street, Vidalia Office 165 Phone: 912-538-3126 Email: Helen Thomas hthomas@southeasterntech.edu	Vidalia Campus 3001 East 1 st Street, Vidalia Office 138B Phone: 912-538-3230 Email: Melanie Walker mwalker@southeasterntech.edu

ACCESSIBILITY STATEMENT

Southeastern Technical College is committed to making course content accessible to individuals to comply with the requirements of Section 508 of the Rehabilitation Act of Americans with Disabilities Act (ADA). If you find a problem that prevents access, please contact the course instructor.

GRIEVANCE PROCEDURES

Grievance procedures can be found in the Catalog and Handbook located on Southeastern Technical College'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 [Southeastern Technical College \(STC\) Website \(www.southeasterntech.edu\)](http://www.southeasterntech.edu).

TECHNICAL COLLEGE SYSTEM OF GEORGIA (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.

GRADING POLICY

Assessment/Assignment	Percentage
Test	50%
Lab Assignments	50%

GRADING SCALE

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

AIRC 1030 Electrical Fundamentals

Fall Semester 2023 - 202412

Date/Week	Chapter/Lesson	Content	Assignments	Competency Area
Aug 21-24		Safety	Read Chapter and answer review questions	1 a, c
Aug 28-31 Sept 5-14	Unit 1	What you need to know to understand electricity.	Read unit and answer review questions. Complete test in Black Board by 11-18-22	1 a, c
September 18-28	Unit 2	Ohms' law and circuit operation.	Read unit answer review questions. Complete test in Black Board by 11-18-22	1, 2 a,b, c
Oct 2-12	Unit 3	Safe use of electrical instruments	Read unit answer review questions. Complete lab assignment. Complete test in Black Board by 11-19-22	1, 2 a,b, c
Oct 16-19	Unit 4	Electrical Fasteners	Read unit answer review questions . Complete test in Black Board by 11-19-22	1, 2 a,b, c
Oct 23-26	Unit 5	Power Distribution	Read unit answer review question.	1, 3, a, c
Oct 30&31 Nov 1&2	Unit 6	National Electrical Code	Read Chapter Complete test in Black Board by 11-19-22	1, 2, 3,4 a, c
Nov 6-16	Unit 7	Electrical Installation of HVACR	Complete labs and test in Black Board by 11-19-22	1, 2,3, a,b, c
Nov27-30	Unit Test		Complete all test in Blackboard.	1, 2,3,4 a,b, c
Dec 4-7	Unit 1,2,3,4,5,6,7	Finish all Labs and Tests Review for Finals	Review for Finals Final Exam	1, 3, 4, 5 a,b, c
		FINALS		

COURSE COMPETENCIES (PER KMS STANDARD)

1. Safety
2. AC and DC Theory
3. Electric Meters
4. Electrical Diagrams and Circuits
5. Electrical Distribution Systems

GENERAL CORE EDUCATIONAL COMPETENCIES:

- 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.