



AIRC-1090
COURSE SYLLABUS
Lab / Lecture
Summer Semester 2017

Semester: Summer 2017
Course Title: AIRC-1090
Troubleshooting Air Conditioning Systems
Credit Hours/ Minutes: 4 / 4500
Class Location: Room # 423
Class Meets: M /T/W/R 8:00-11:30 am
CRN: 60051

Instructor: Vince Scott
Office Hours: M/ T/ W/ R 3:30 – 5:30 PM
Email Address: vscott@southeasterntech.edu
Phone: (912) 538-3156
Fax Number: (912) 538-3156
Tutoring Hours: as needed

REQUIRED TEXT: Fundamentals of HVAC/R 2nd edition textbook by Prentice Hall Authors Carter Stanfield and David Skaves **ISBN: 0-13-285961**

REQUIRED SUPPLIES: MUST HAVE EVERY DAY IN CLASS: safety glasses, notebook for taking notes, 3 ring binder for hand-outs, and pen or pencil to use in class every day. A Digital Volt, Ohm meter, and a clamp-on AMP meter required for every day of class. Also a voltage test detector for pocket

NOTE: You must have textbook and notebook with pen or pencil with you each day for class.

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. If you need a belt and do not have one, instructor will help you find one.

Safety glasses: Must be worn at all times while working in the lab.

Electronics: Radios, CD players, and headsets are not to be used in the class / Lab. Cell phones are not be used during class / Lab.

COURSE DESCRIPTION: AIRC 1090 this course provides instruction on the troubleshooting and repair of major components of a residential air conditioning system.

HOMEWORK REQUIREMENTS: From the class text book listed, READ and ANSWER the questions at the end of each unit. Answer all assigned questions, these include units 3, 90, 91 and 92

MAJOR COURSE COMPETENCIES:

Troubleshooting techniques
Electrical controls
Air flow
Refrigeration cycle,
Electrical servicing procedures
Safety

PREREQUISITE(S): AIRC 1090 or Provisional Admission

GENERAL EDUCATION CORE COMPETENCIES: STC 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.

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: Students are expected to complete all tests and comprehensive 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*.

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 that 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.

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.

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 Helen Thomas, 912-538-3126, hthomas@southeasterntech.edu, to coordinate reasonable accommodations.

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 advise me and make appropriate arrangements with Helen Thomas, (912) 538-3126, hthomas@southeasterntech.edu.

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.

Students who are dropped from courses due to attendance (see your course syllabus for attendance policy) after drop/add until the 65% point of the semester will receive a "W" for 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.

MAKEUP GUIDELINES (Tests, quizzes, homework, projects, etc...): If a student misses a test, 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 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

--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 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: 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).

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

ADA/Section 504 - Equity- Title IX (Students) - OCR Compliance Officer	Title VI - Title IX (Employees) - EEOC Officer
Helen Thomas, Special Needs Specialist Vidalia Campus 3001 East 1 st Street, Vidalia Office 108 Phone: 912-538-3126 hthomas@southeasterntech.edu	Blythe Wilcox, Director of Human Resources Vidalia Campus 3001 East 1 st Street, Vidalia Office 138B Phone: 912-538-3147 bwilcox@southeasterntech.edu

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 Banner Web via the mySTC portal or by clicking the Current Students link on the STC website at www.southeasterntech.edu.

GRADING POLICY

Written Test-----
30%
Lab Test-----
20%
Lab Assignments-----
50%

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.

Note: Times and dates subject to change

**AIRC 1090 Servicing
SUMMER SEMESTER 2017 LESSON PLAN**

Date	Chapter	Content	Assignments & Tests Due	Comp Area
May 17&18	Unit 3	Safety Procedures and applications	Identify and discuss the safety hazards the technician may encounter in troubleshooting and servicing air conditioning systems	1 a, c
May 22 - 25	Unit 92	Troubleshooting Techniques Applications	Demonstrate proper troubleshooting techniques Isolate compressor malfunctions Perform pre-seasonal startups	1,2 a, c
May 29 – June 1	Unit 90	Electrical Controls Applications	Isolate electrical malfunctions	1,2,3,4 a, c
June 5-8	Unit 90	Air Flow Applications	Isolate air flow problems	1,2,3,4 a, c
June 12 - 15	Unit 90	Servicing Procedures	Isolate air flow problems	1,2,3,4 a, c
June 19 - 22	Unit 91	Refrigeration Cycle Applications	Isolate refrigeration malfunctions Use P-T charts or manufacturer's charts to charge an air conditioning system	1,2,3,4,5 a, c
June 26 - 29	Unit 91	Practical applications	Isolate refrigeration malfunctions Use P-T charts or manufacturer's charts to charge an air conditioning system	1,2,3,4,5 a, c
July 3 -6	Holiday	Holiday	Holiday	Holiday
July 10 - 13	Unit 92	Electrical and Servicing Procedures Applications	Perform a voltage drop test on an air conditioning system	1,3,4,5,6 a, c
July 17 - 20	Unit 92	Practical applications	Service various cooling systems Use P-T charts or manufacturer's charts to charge an air conditioning system	1,3,4,5 a, c
July 24 - 26	Units 90,91,92	Review for Finals	Review for Finals	1-8, a, c
July 26	Units 90,91,92	Final Exam	Final Exam	1-8 a,c

*** Competency Areas:**

1. Safety
2. Troubleshooting Techniques

3. Electrical Controls
4. Electrical Controls
5. Refrigeration Cycle
6. Electrical and Servicing Procedures

****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.