



AUTT 1060 COURSE SYLLABUS Summer Semester 2016

Semester: 2016
Course Title: Automotive Climate Control Systems

Instructor: James Harrell
Office Hours: W 1:00PM-6:00PM
T 1:00PM-6:00PM

Course Number: [AUTT 1060](#)
Credit Hours/ Minutes: [5 / 5500](#)
Class Location: Room # SECCA/ Automotive Lab
Class Meets: TWR 5:40PM-9:04PM
CRN: 60121

Office Location: SECCA/ Auto Lab/ room AT-1
Email Address: TWILLIAMS@southeasterntech.edu
Phone: 912-538-3155
Fax Number: 912-538-3106
Tutoring Hours: [See office hours](#)

REQUIRED TEXT: Automotive Technology; Principles, Diagnosis, and Service Fourth Edition by James D. Halderman, published by Pearson



HALDERMAN **AUTOMOTIVE TECHNOLOGY - PRINCIPLES, DIAGNOSIS, AND SERVICE**

PEARSON

REQUIRED SUPPLIES & SOFTWARE REQUIRED SUPPLIES & SOFTWARE: Required items include; Automotive Technology Book, Automotive Technology lab manual, Safety Glasses, 2" Binder notebook for lab sheets, homework and handouts. Writing tools required (pens, pencils). Writing tools will not be loaned out!

Dress Requirements: Approved Uniform; STC Automotive Technology shirts (bookstore). Club t-shirts will be allowed, but not every day. Shirts must be tucked in pants at all time. Work pants, jeans, or work type shorts. Work boots are highly recommended, but may wear tennis shoes, **ABSOLUTELY NO OPEN TOED SHOES** (flip flops, bedroom slippers etc.) Dress code will be enforced and repeated violations of this and all rules could resort in removal from the course. .

Recommended, but not required; Nitrile Gloves, Mechanics Gloves.

COURSE DESCRIPTION: Introduces the theory and operation of automotive heating and air conditioning systems. Students attain proficiency in inspection, testing, service, and repair of heating and air conditioning systems and related components.

MAJOR COURSE COMPETENCIES: Refrigerant Recovery, Recycling, and Handling, Operating Systems and Related Controls Diagnosis and Repair, Heating, Ventilation, and Engine Cooling Systems Diagnosis and Repair, Refrigeration System Component Diagnosis and Repair, A/C System Diagnosis and Repair.

PREREQUISITE(S): AUTT 1010 and AUTT 1020

COURSE OUTLINE:

- I. Refrigerant Recovery, Recycling, and Handling
- II. Operating Systems and Related Controls Diagnosis and Repair
- III. Heating, Ventilation, and Engine Cooling Systems Diagnosis and Repair
- IV. Refrigeration System Component Diagnosis and Repair
- V. A/C System Diagnosis and Repair

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: Assignments must be completed on the specified date. All work must be turned in at the beginning of class on the specified due dates. If a student is absent from class, all work must be turned in at the beginning of class the next day upon returning to class. If this is not done, then a grade of zero will be given on the work. Failure to take tests on the scheduled day will result in a grade of zero for the test not taken. **Make-up assignments and/or exams will be decided by the instructor!**

EXIT EXAM: The final exam for AUTT 1060 will be the exit and capstone exam for the 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.

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 Jan Brantley, Room 1208 Swainsboro Campus, 478-289-2274, or Helen Thomas, Room 108 Vidalia Campus, 912-538-3126, 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 the Special Needs Office. Swainsboro Campus: Jan Brantley, Room 1208, (478) 289-2274 -- Vidalia Campus: Helen Thomas, Room 108, (912) 538-3126.

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...): Assignments must be completed on the specified date. All work must be turned in at the beginning of class on the specified due dates. If a student is absent from class, all work must be turned in at the beginning of class the next day upon returning to class. If this is not done, then a grade of zero will be given on the work. Failure to take tests on the scheduled day will result in a grade of zero for the test not taken.

Make-up assignments and/or exams will be decided by the instructor!

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 Angel, 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

Exams	30%
Lab Activities	15%
Finals	30%
Assignments	25%

GRADING SCALE

A: 90-100
B: 80-89
C: 70-79

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*

100%

D: 60-69
F: 0-59

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.

AUTT1060 Automotive Climate Control Summer Semester 2016				
Date	Chapter / Lesson	Content	Assignments & Tests	*Comp. Area
WEEK 1				
May 18-19	CH 62	REFRIGERANT RECOVERY, RECYCLING, AND HANDLING AC SYSTEM DIAGNOSIS AND REPAIR	<ol style="list-style-type: none"> 1. Welcome & explanation of course & syllabus. 2. Begin reading CH 62 3. Power Point/Lecture 4. Homework Assignment CH 62; Answer Review questions and take Chapter quiz. 5. Begin Lab manual assignments 6. Weekly test and/or quizzes given at instructor's discretion. 	NATE F P-1 5, a,b,c,d
WEEK 2				

May 24- 26	CH 62	REFRIGERANT RECOVERY, RECYCLING, AND HANDLING AC SYSTEM DIAGNOSIS AND REPAIR	<ul style="list-style-type: none"> 7. Continue reading CH 62 8. Power Point/Lecture 9. Homework Assignment CH 62; Answer Review questions and take CH quiz. 10. Continue lab manual assignments 11. Weekly test and/or quizzes given 	NATE F P-1 5, a,b,c,d
	CH 62	REFRIGERANT RECOVERY, RECYCLING, AND HANDLING AC SYSTEM DIAGNOSIS AND REPAIR	<ul style="list-style-type: none"> 12. Continue reading CH 62 13. Power Point/Lecture 14. Homework Assignment CH 62; Answer Review questions and take CH quiz. 15. Continue lab manual assignments 16. Weekly test and/or quizzes given 	NATE F P-1 5, a,b,c,d
WEEK 3				
May 31- June 2	CH 62	REFRIGERANT RECOVERY, RECYCLING, AND HANDLING AC SYSTEM DIAGNOSIS AND REPAIR	<ul style="list-style-type: none"> 17. Continue reading CH 62 18. Power Point/Lecture 19. Homework Assignment CH 62; Answer Review questions and take CH quiz. 20. Continue lab manual assignments 21. Weekly test and/or quizzes given 	NATE F P-1 5, a,b,c,d
	CH 62	REFRIGERANT RECOVERY, RECYCLING, AND HANDLING AC SYSTEM DIAGNOSIS AND REPAIR	<ul style="list-style-type: none"> 22. Homework Assignment CH 62 (DUE) 23. Lab Manual Assignments (DUE) 24. CH 62 TEST 25. Begin Reading CH 63 	NATE F P-1 5, a,b,c,d
WEEK 4				
June 7-9	CH 63	OPERATING SYSTEMS AND RELATED CONTROLS DIAGNOSIS AND REPAIR	<ul style="list-style-type: none"> 1. Continue reading CH 63 2. Power Point/Lecture 3. Homework Assignment CH 63; Answer Review questions and take CH quiz. 4. Continue lab manual assignments 5. Weekly test and/or quizzes given 	NATE F P-1 5, a,b,c,d

	CH 63	OPERATING SYSTEMS AND RELATED CONTROLS DIAGNOSIS AND REPAIR	<ul style="list-style-type: none"> 6. Continue reading CH 63 7. Power Point/Lecture 8. Homework Assignment CH 63; Answer Review questions and take CH quiz. 9. Continue lab manual assignments 10. Weekly test and/or quizzes given 	NATE F P-1 5, a,b,c,d
WEEK 5				
June 14- 16	CH 63	OPERATING SYSTEMS AND RELATED CONTROLS DIAGNOSIS AND REPAIR	<ul style="list-style-type: none"> 11. Continue reading CH 63 12. Power Point/Lecture 13. Homework Assignment CH 63; Answer Review questions and take CH quiz. 14. Continue lab manual assignments 15. Weekly test and/or quizzes given 	NATE F P-1 5, a,b,c,d
	CH 63	OPERATING SYSTEMS AND RELATED CONTROLS DIAGNOSIS AND REPAIR	<ul style="list-style-type: none"> 16. Homework Assignment CH 63 (DUE) 17. Lab Manual Assignments (DUE) 18. CH 63 TEST 19. Begin Reading CH 64 	NATE F P-1 5, a,b,c,d
WEEK 6				
June 21- 23	CH 64	HEATING, VENTILATION, AND ENGINE COOLING SYSTEMS DIAGNOSIS AND REPAIR	<ul style="list-style-type: none"> 1. Continue reading CH 64 2. Power Point/Lecture 3. Homework Assignment CH 64; Answer Review questions and take CH quiz. 4. Continue lab manual assignments 5. Weekly test and/or quizzes given 	NATE F P-1 5, a,b,c,d
	CH 64	HEATING, VENTILATION, AND ENGINE COOLING SYSTEMS DIAGNOSIS AND REPAIR	<ul style="list-style-type: none"> 6. Continue reading CH 64 7. Power Point/Lecture 8. Homework Assignment CH 64; Answer Review questions and take CH quiz. 9. Continue lab manual assignments 10. Weekly test and/or quizzes given 	NATE F P-1 5, a,b,c,d
WEEK 7				

July 28-30	CH 64	HEATING, VENTILATION, AND ENGINE COOLING SYSTEMS DIAGNOSIS AND REPAIR	<ul style="list-style-type: none"> 11. Continue reading CH 64 12. Power Point/Lecture 13. Homework Assignment CH 64; Answer Review questions and take CH quiz. 14. Continue lab manual assignments 15. Weekly test and/or quizzes given 	NATE F P-1 5, a,b,c,d
	CH 64	HEATING, VENTILATION, AND ENGINE COOLING SYSTEMS DIAGNOSIS AND REPAIR	<ul style="list-style-type: none"> 16. Homework Assignment CH 64 (DUE) 17. Lab Manual Assignments (DUE) 18. CH 64 TEST 19. Begin Reading CH 65 	NATE F P-1 5, a,b,c,d
WEEK8				
July 12-14	CH 65	REFRIGERATION SYSTEMS COMPONENT DIAGNOSIS AND REPAIR	<ul style="list-style-type: none"> 1. Continue reading CH 65 2. Power Point/Lecture 3. Homework Assignment CH 64; Answer Review questions and take CH quiz. 4. Continue lab manual assignments 5. Weekly test and/or quizzes given 	NATE F P-1 5, a,b,c,d
	CH 65	REFRIGERATION SYSTEMS COMPONENT DIAGNOSIS AND REPAIR	<ul style="list-style-type: none"> 6. Continue reading CH 65 7. Power Point/Lecture 8. Homework Assignment CH 65; Answer Review questions and take CH quiz. 9. Continue lab manual assignments 10. Weekly test and/or quizzes given 	NATE F P-1 5, a,b,c,d
WEEK9				
July 19-21	CH 65	REFRIGERATION SYSTEMS COMPONENT DIAGNOSIS AND REPAIR	<ul style="list-style-type: none"> 11. Continue reading CH 65 12. Power Point/Lecture 13. Homework Assignment CH 65; Answer Review questions and take CH quiz. 14. Continue lab manual assignments 15. Weekly test and/or quizzes given 	NATE F P-1 5, a,b,c,d

	CH 65	REFRIGERATION SYSTEMS COMPONENT DIAGNOSIS AND REPAIR	20. Homework Assignment CH 65 (DUE) 21. Lab Manual Assignments (DUE) 22. CH 65 TEST 23. PREPARE FOR FINAL	NATE F P-1 5, a,b,c,d
WEEK 10				
FINAL EXAM				

Lessons may be changed at instructors discretion due to time constraints and other reasons beyond control.

*** Competency Areas:**

Automotive Climate Control Systems Competency Areas:

1. A/C System Diag. and Repair
2. Refrigeration System Component Diag. and Repair
3. Heating, Ventilation, and Engine Cooling Systems Diag. and Repair
4. Operating Systems and Related Controls Diag. and Repair
5. Refrigerant Recovery, Recycling, and Handling

General Core Competency Areas:

- 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.
- d. The ability to utilize basic computer skills.

