



AUTT1030 COURSE SYLLABUS Lecture / LAB Fall Semester 2015

Semester: 201612 Fall 2015
Course Title: Automotive Brake Systems
Course Number: AUTT1030
Credit Hours/ Minutes: 4 / 5250
Class Location: Room # SECCA/ Automotive Lab
Class Meets: M/T2:00PM-5:00PM
CRN: 20151

Instructor: Travis Williams
Office Hours: MTW 4:30PM-6:00PM/R 1:00PM-6:00PM
Office Location: SECCA/ Auto Lab/ room AT-1
Email Address: twilliams@southeasterntech.edu
Phone: (912) 538-3155
Fax Number: (912) 538-3106

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 items include; Automotive Technology Book, Automotive Technology lab manual, Safety Glasses, 1” Binder notebook for lab sheets, and Approved Uniform, STC Automotive Technology Shirts. (Shirts can be purchased in the bookstore)
Recommended, but not required; Nitrile Gloves, Mechanics Gloves.

COURSE DESCRIPTION: Introduces brake systems theory and its application to automotive systems and anti-lock brake system (ABS) to include ABS components and ABS operation, testing, and diagnosis.

MAJOR COURSE COMPETENCIES: General Brake System Diagnosis, Hydraulic System Diagnosis and Repair, Drum Brake Diagnosis and Repair, Disc Brake Diagnosis and Repair, Power Assist Units Diagnosis and Repair, Miscellaneous Brake Components.

PRE-requisite(S): none

CO-requisites: All Required

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, analyzes, and interprets information.
4. The ability to utilize basic computer skills.

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 worked 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. The makeup test must be taken the next day upon returning to class. The zero assigned for the missed test will be replaced with the grade the student makes on the makeup exam. **STUDENTS WILL ONLY BE ALLOWED TO**

TAKE ONE MAKEUP TEST DURING THE SEMESTER!!!!

STC ATTENDANCE POLICY: It is essential that educational programs maintain requirements and standards necessary for successful employment of its graduates in business and industry. In view of the intensive nature of the educational programs, it is necessary for every student to be present and on time every day for all classes. Attendance is counted from the first scheduled class meeting of each semester. To receive credit for a course a student must attend at least 90% of the scheduled instructional time. All work missed due to tardiness or absences must be made up at the convenience of the instructor. Any student attending less than the required scheduled instructional time as noted on each syllabus will receive a "W" for the course if removed from the course on or before midterm. After the semester midterm, any student who has maintained a passing grade within a course will receive a 'WP' for the course when attending less than the required scheduled instructional time as stated on each course syllabus. If, however, the student has not maintained a passing grade, he or she will receive a 'WF' for the course. Tardy means arriving after the scheduled time for instruction to begin. Early departure means leaving before the end of the scheduled time. Three (3) tardies or early departures equal one (1) absence for the course involved.

TRADITIONAL ATTENDANCE ADDENDUM: AUTT1030 Fall 2013 you are only allowed (3) absences for the semester.

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 documented special needs may be provided with an individualized Instructional Plan with specifications for scheduled instructional time. It is the student's responsibility to inform the Special Needs Specialist as students and instructors are required to have documented evidence prior to receiving or allowing special accommodations. See the STC Catalog and Student Handbook, Student Affairs section for further information regarding special needs.

SPECIAL NEEDS ADDENDUM: 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 2105 Swainsboro Campus, 478-289-2274, or Helen Thomas, Room 108 Vidalia Campus, 912-538-3126, to coordinate reasonable accommodations.

MAKEUP GUIDELINES: 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. The makeup test must be taken the next day upon returning to class. The zero assigned for the missed test will be replaced with the grade the student makes on the makeup exam. **STUDENTS WILL ONLY BE ALLOWED TO TAKE ONE MAKEUP TEST DURING THE SEMESTER!!!!**

Students are expected to attend class. Unannounced quizzes/assignments will be given during the semester. No makeups are allowed for unannounced quizzes/assignments. A grade of zero will be given for all missed unannounced quizzes/assignments.

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.

ACCESS TO TECHNOLOGY: For information regarding Angel, the Information Delivery System (IDS), Student Owl Mail, and Banner Web, please see the IT Department link on STC's website at <http://www.southeasterntech.edu>.

GRADING POLICY

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| Exams | 35% |
| Lab Activities | 30% |
| Finals | 20% |
| Assignments | 15% |
| <hr/> | |
| | 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.*

**AUTT 1030 – AUTOMOTIVE BRAKE SYSTEMS
FALL SEMESTER 2014**

| Date | Chapter / Lesson | Content | Assignments & Tests | *Comp. Area |
|----------------|------------------|---------|---------------------|-------------|
| -WEEK 1 | | | | |

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|-------------------------|---------------|--|---|---------------------------------------|
| AUG 17/18 | CH 92- 93 | GENERAL BRAKE SYSTEM DIAGNOSIS | <ol style="list-style-type: none"> Welcome & explanation of course & syllabus. Begin reading CH's 92-93 Power Point/Lecture Homework Assignment CH's 92-93; Answer Review questions and take Chapter quiz. Begin Lab manual assignments 92-93 Weekly test and/or quizzes given at instructor's discretion. | NATEF P1 1,a,b,c,d |
| WEEK 2 | | | | |
| AUG 24/25 | CH 92- 93 | GENERAL BRAKE SYSTEM DIAGNOSIS | <ol style="list-style-type: none"> Continue reading CH's 92-93 Power Point/Lecture Continue Homework Assignment CH's 92-93; Answer Review questions and take Chapter quiz. Continue Lab manual assignments 92-93 Weekly test and/or quizzes given at instructor's discretion. Home Work & Lab Manual assignments CH's 92-93 (DUE) Lab Manual Assignments (DUE) Test over CH's 92-93 Begin Reading CH's 94-97 | NATEF P1 1,a,b,c,d |
| WEEK 3 | | | | |
| AUG 31/ SEPT 1 | CH 94- 97 | HYDRAULIC SYSTEM DIAGNOSIS AND REPAIR | <ol style="list-style-type: none"> Continue reading CH's 94-97 Power Point/Lecture Homework Assignment CH's 94-97; Answer Review questions and take Chapter quiz. Begin Lab manual assignments 94-97 Weekly test and/or quizzes given at instructor's discretion. | NATEF P-1,P-2, P-3 2,a,b,c,d |
| WEEK4 | | | | |
| SEPT 7/8 | CH 94/97 | HYDRAULIC SYSTEM DIAGNOSIS AND REPAIR | <ol style="list-style-type: none"> Continue Reading CH's 94-97 Power Point/Lecture Continue Homework Assignment CH's 94-97. Answer Review questions and take Chapter quiz. Continue Lab Assignments CH's 94-97 Weekly test and/or quizzes given at instructors discretion Home Work & Lab Manual assignments CH's 94-97(DUE) TEST OVER CH's 94-97 Begin Reading CH's 99-100 | NATEF P-1,P-2, P-3 2,a,b,c,d |
| WEEKS | | | | |
| SEPT 14/15 | CH 99- 100 | DRUM BRAKE DIAGNOSIS AND REPAIR | <ol style="list-style-type: none"> Continue Reading CH's 99-100 Power Point/Lecture Homework Assignment CH's 99-100. Answer Review questions and take Chapter quiz. Begin Lab Assignment 99-100 Weekly Test and/or quizzes given at instructors discretion | NATEF P-1,P-3 3,a,b,c,d |

| WEEK 6 | | | | |
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| SEPT 21/22 | CH 99- 100 | DRUM BRAKE DIAGNOSIS AND REPAIR | <ol style="list-style-type: none"> 1. Continue Reading CH's 99-100 2. Power Point/Lecture 3. Continue Homework Assignment CH's 99-100. Answer Review questions and take Chapter quiz. 4. Continue Lab Assignment 99-100 5. Weekly Test and/or quizzes given at instructors discretion 6. Homework & Lab Assignments CH's 99-100(DUE) 7. Test Over CH's 99-100 8. Begin Reading CH's 101-102,104 | NATEF P-1,P-3 3,a,b,c,d |
| WEEK 7 | | | | |
| SEPT 28/29 | CH 101- 102,104 | DISC BRAKE DIAGNOSIS AND REPAIR | <ol style="list-style-type: none"> 1. Continue Reading CH's 101-102,104 2. Power Point/Lecture 3. Homework Assignment CH's 101-102,104. Answer Review questions and take Chapter quiz. 4. Begin Lab Assignment 101-102,104 5. Weekly Test and/or quizzes given at instructors discretion | NATEF P-1,P-2, 4,a,b,c,d |
| WEEK 8 | | | | |
| OCT 5/6 | CH 101- 102,104 | DISC BRAKE DIAGNOSIS AND REPAIR | <ol style="list-style-type: none"> 1. Continue Reading CH's 101,102,104 2. Power Point/Lecture 3. Continue Homework Assignment CH's 101,102,104. Answer Review questions and take Chapter quiz. 4. Continue Lab Assignment 101,102,104 5. Weekly Test and/or quizzes given at instructors discretion 6. Homework & Lab Assignments CH's 101-102,104(DUE) 7. Test Over CH's 101-102,104 8. Begin Reading CH 105 | NATEF P-1,P-2, 4,a,b,c,d |
| WEEK 9 | | | | |
| OCT 12/13 | CH 105 | POWER ASSIST UNITS DIAGNOSIS AND REPAIR | <ol style="list-style-type: none"> 1. Continue Reading CH 105 2. Power Point/Lecture 3. Homework Assignment CH 105. Answer Review questions and take Chapter quiz. 4. Begin Lab Assignment CH 105 5. Weekly Test and/or quizzes given at instructors discretion | NATEF P-1,P-2,P- 3, 5,a,b,c,d |
| WEEK 10 | | | | |

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| OCT 19/20 | CH 105 | POWER ASSIST UNITS DIAGNOSIS AND REPAIR | <ol style="list-style-type: none"> 1. Continue Reading CH 105 2. Power Point/Lecture 3. Continue Homework Assignment CH 105. Answer Review questions and take Chapter quiz. 4. Continue Lab Assignment 105 5. Weekly Test and/or quizzes given at instructors discretion 6. Homework & Lab Assignments CH 105 (DUE) 7. Test Over CH 105 8. Begin Reading CH's 98,103 | NATEF P-1,P-2,P-3, 5,a,b,c,d |
| WEEK 11 | | | | |
| OCT 26/27 | CH 98,103 | MISCELLANEOUS BRAKE COMPONENTS (wheel bearings, Parking Brakes, Electrical, etc.) DIAGNOSE AND REPAIR | <ol style="list-style-type: none"> 1. Continue reading CH's 98,103 2. Power Point/Lecture 3. Homework CH's 98,103. Answer Review questions and take Chapter quiz. 4. Begin Lab Assignment CH's 98,103 5. Weekly Test and/or quizzes given at instructors discretion | NATEF P-1,P-2, P-3 6,a,b,c,d |
| WEEK 12 | | | | |
| NOV 2/3 | CH 98,103 | MISCELLANEOUS BRAKE COMPONENTS (wheel bearings, Parking Brakes, Electrical, etc.) DIAGNOSE AND REPAIR | <ol style="list-style-type: none"> 1. Continue reading CH's 98,103 2. Power Point/Lecture 3. Continue Homework CH's 98,103. Answer Review questions and take Chapter quiz. 4. Continue Lab Assignment CH's 98,103 5. Weekly Test and/or quizzes given at instructors discretion 6. Homework and Lab Assignment CH's 98,103 (DUE) 7. Test CH's 98,103 8. Begin Reading CH 106-108 | NATEF P-1,P-2, P-3 6,a,b,c,d |
| WEEK 13 | | | | |
| NOV 9/10 | CH 106-108 | ELECTRONIC BRAKE, TRACTION, AND STABILITY CONTROL SYSTEMS DIAGNOSIS AND REPAIR | <ol style="list-style-type: none"> 1. Continue reading CH's 103-108 2. Power Point/Lecture 3. Homework CH's 106-108. Answer Review questions and take Chapter quiz. 4. Begin Lab Assignment CH's 106-108 5. Weekly Test and/or quizzes given at instructors discretion | NATEF P-1, P-2, P-3 7,a,b,c,d |
| WEEK 14 | | | | |
| NOV 16/17 | CH 106-108 | ELECTRONIC BRAKE, TRACTION, AND STABILITY CONTROL SYSTEMS DIAGNOSIS AND REPAIR | <ol style="list-style-type: none"> 1. Continue reading CH's 106-108 2. Power Point/Lecture 3. Continue Homework CH's 106-108. Answer Review questions and take Chapter quiz. | NATEF P-1, P-2, P-3, 7,a,b,c,d |

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| | | | <ul style="list-style-type: none"> 4. Continue Lab Assignment CH's 106-108. Answer Review Questions and take Chapter Quizzes 5. Weekly Test and/or quizzes given at instructors discretion 6. CH's 106-108 Homework and Lab Assignment (DUE) 7. Test CH's 106-108 | |
| WEEK 15 | | | | |
| NOV 23/24 | | PREPARE FOR FINALS | | |
| WEEK16 | | | | |
| DEC 1 | | FINALS | | NATEF P-1,P-2, P-3 1,2,3,4,5,6 ,7,a,b,c,d |

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

*** Competency Areas:**

Automotive Brake System Competency Areas:

1. General Brake System Diagnosis
2. Hydraulic system Diagnosis and Repair
3. Drum Brake Diagnosis and Repair
4. Disc Brake System and Repair
5. Power Assist Units Diagnosis and Repair
6. Miscellaneous Brake Components (Wheel Bearings, Parking Brakes, Electrical, Etc.) Diagnosis and Repair
7. Electronic Brake Control Systems Diagnosis and Repair

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, analyzes, and interprets information.