AUMT1305-23105

Introduction to Automotive Technology

Course Description

An introduction to the automotive service industry including automotive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, fasteners, professional responsibilities, and automotive maintenance. May be taught manufacturer specific.

(3 C/ 2 lect, 1 lab, 0 other)

Course Focus

This course includes a substantial amount of hands-on learning activities which cannot be rescheduled. Regular attendance is mandatory for successful completion of the course.

Text and References

Myautoclass.com—Today’s Class PDF’s
Automotive Technology, Principles, Diagnostics, and Service
Automotive Laboratory Exercises: David McNabb
Selected Manufacturer Specific Materials/Publications
Selected Internet and Online Resources

Course Goals

The following list of course goals will be addressed in the course. These goals are directly related to the performance objectives.

1. explain service department organization
2. define technician responsibilities
3. explain warranty policies
4. write vehicle repair order
5. estimate automotive repair labor
6. explain general automotive shop safety procedures
7. explain automotive hazardous materials safety procedures
8. demonstrate safe vehicle lifting procedure
9. identify common automotive tools and equipment
10. explain automotive hand/power tool usage
11. demonstrate proper soldering techniques
12. explain common automotive measuring systems
13. demonstrate precision measuring tool usage
14. define engine system component terms
15. explain engine rating and identification systems
16. define emission control system component terms
17. define electrical terms
18. explain electrical principles
19. measure voltage
20. measure current
21. measure resistance
22. define electrical system component terms
23. test automotive battery condition
24. explain common cooling system operation and diagnosis
25. define accessory system component terms
26. define drive train system component terms
27. define body/chassis system component terms
28. identify automotive service data sources
29. explain service manual organization
30. interpret vehicle identification number information
31. locate vehicle service information
32. interpret service manual diagnostic diagrams/charts
33. explain fasteners gaskets/seals and sealant usage
34. explain common vehicle maintenance schedules
35. inspect vehicle fluid levels/leaks
36. inspect vehicle belts/hoses
37. lubricate vehicle suspension
38. replace engine oil/filter
39. rotate tires
40. balance tires

Student Contributions

Each student will spend at least 15 hours per week preparing for class. Attendance is critical in this class.

Course Evaluation

Final Grade is composed of:
40% - Participation
25% - Quizzes and Multimedia Assignment (Note: Failure to successfully complete the assigned web-based assignment(s) (Today’s Class, +SP2, etc..) will result in failure of the entire course.
35% - Final Exam

Final grade will be of letter type:
A = 90 to 100 points
B = 80 to 89 points
C = 70 to 79 points
F = Below 70 points
I = Incomplete

Student Learning Outcomes

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- Apply safety standards when working in an automotive service facility
- Understand service facility operational procedures and technician responsibilities
- Demonstrate proficiency in the use of common automotive hand tools and measuring equipment
- Demonstrate proficiency in locating, identifying and following procedures in online service information resources
- Perform a multipoint vehicle condition inspection and recommend necessary service
- Perform routine vehicle maintenance service procedures in accordance with industry guidelines

Syllabus Notes:
Instructor retains the sole right to change or modify this syllabus as class needs become apparent. Instructor will notify students prior to changes in the syllabus (Course grading methodology will not change). NOTE: Notification of change in the syllabus (if any) will be verbal and it is your responsibility to be here to hear about it.

**Grading Policy**: Each day you will earn a total of 5 points for class participation toward your total course grade (up to a maximum of 40 points). You must be here to earn any points. If you are absent, you earn no points. If you don’t return from lunch, you forfeit all points for that day. If you do not arrive until after lunch, you forfeit all points for that day. If you are late to class, you lose 1 point. For each 3 instances where you are late, you lose 5 points. If you are asked to leave the class due to failure to comply with my requests, you lose all points for the day. If you leave early without my permission, you lose all points for that day. Class participation involves more than sleeping in class. You must follow my instructions at all times or lose points.

**Generally speaking, there are no excused absences.** Regardless of the reason for an absence, if you are not here, you are not participating and getting what you need out of the class. This class has a required number of contact hours for successful completion. Note that more than 2 absences will result in failure of the course. ½ day absences count as full day absences. I will administer pop quizzes at any point during the class. **THERE IS NO MAKEUP FOR POP QUIZZES!!** I generally do not allow for any extra-credit assignments. You need to successfully complete the regular assignments. You must stay “on station” at all times when in the shop environment. If you need to leave your work station, let me know. Any violation of this policy will result in a loss of points from your class participation score. Ringing cell phones and texting are a problem and will result in a loss of points on your class participation grade. **DO NOT MAKE OR RECEIVE PHONE CALLS or TEXT DURING CLASS OR WHILE IN THE SHOP ENVIRONMENT.** Use 972-860-4189 (Susie) or 972-860-4180 (shop) for an emergency contact number for those that may need to get in touch with you in case of an emergency. **Smoke in the parking lot only.**

Any missed test or quiz (except pop quizzes—see above) must be made up within two class periods or a zero (0) will be entered for the missed test or quiz score.

It is a **requirement** that you bring the following with you each class:

1. Tools, safety glasses.
2. Textbook.
3. Pens or pencils, and something to take notes with.
4. Calculators are welcome and will be handy at times.

**Receiving Your Final Semester Grades:**
End-of-semester grades will not be mailed to you by the college.

**INTERNET ACCESS TO GRADES**
Go to the Dallas County Community College District website (http://www.dcccd.edu).
1. Click on eConnect, then select ‘Current Credit Student Menu’
2. Under the heading ‘My eConnect Account’, select Log In.
3. Enter your seven-digit student ID number (not your Social Security number.)
4. Enter your password or, if this is your first time to use the system, enter your date of birth.
5. Under the heading ‘My Personal Information’, select Check My Grades.
6. Select the term and grade type that you wish to review, then click on ‘Submit’
Americans with Disabilities Policy Statement - If you feel you may need an academic adjustment (such as help with taking notes, etc.) because of any type of physical disability or learning difference, please talk with your instructor during office hours or by appointment before the end of the first week of classes. You may also contact Disability Services at (972) 860-4673 room S136 for advisement and counseling. bhcADAservices@dcccd.edu

Notification Of Absence Due To Religious Holy Day(s) - Absences for observance of a religious holy day are excused if you inform your instructor at the beginning of the course. A student whose absence is excused to observe a religious holy day is allowed to contract with the instructor to take a make-up examination or complete an assignment within a reasonable time after the absence.

Financial Aid Statement
Students who are receiving any form of financial aid should check with the Financial Aid Office prior to withdrawing from classes. Withdrawals may affect your eligibility to receive further aid and could cause you to be in a position of repayment for the current semester. Students who fail to attend or participate after the drop date are also subject to this policy.

Drop Policy - If you do not wish to complete this course, you are responsible for withdrawing yourself from the class. If you are unable to complete this course you must withdraw from it by February 6th, 2015. Withdrawing from this course is a formal procedure which you must initiate. The instructor or instructional associate cannot do it for you. You may do this in admissions or counseling. If you stop attending and do not withdraw you will receive a performance grade, usually an "F". Students sometimes drop courses when help is available that would enable them to continue. If you feel the need to withdraw, please discuss your plans with the instructor or instructional associate.

STOP BEFORE YOU DROP
For students who enrolled in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop.
You may drop no more than 6 courses during your entire undergraduate career unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions.
Remember that once you have accumulated 6 non-exempt drops, you cannot drop any other courses with a “W”. Therefore, please exercise caution when dropping courses in any Texas public institution of higher learning, including all seven of the Dallas County Community Colleges. For more information, you may access:
http://www.dcccd.edu/Why/Reg/Registration/Pages/DropWithdraw.aspx

Repeating a Course-Effective for Fall Semester 2005, the Dallas County Community Colleges will charge additional tuition to students registering the third or subsequent time for a course. All third and subsequent attempts of the majority of credit and Continuing Education/Workforce Training courses will result in additional tuition to be charged. Developmental Studies and some other courses will not be charged a higher tuition rate. Third attempts include courses taken at any of the Dallas County Community Colleges since the Fall 2002 Semester. See Third Attempt to Enroll in a Course at
http://www.dcccd.edu/pc/cost/3rdcrseattmpt/Pages/default.aspx
**Academic dishonesty**- Academic dishonesty is a violation of the Code of Student Conduct. Academic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion. As a college student, you are considered a responsible adult. Your enrollment indicates acceptance of the DCCCD Code of Student Conduct:

https://www1.dcccd.edu/catalog/ss/code.cfm