Syllabus

AUMT 2321-23102

Automotive Electrical Diagnosis and Repair

Course Description

Repair of automotive electrical subsystems, lighting, instrumentation, and accessories. Emphasis on accurate diagnosis and proper repair methods using various troubleshooting skills and techniques. May be taught with manufacturer specific instructions.

Learning Outcomes

Utilize appropriate safety procedures; explain the operation, diagnosis, and repair of body electrical systems; describe the operation, diagnosis, and repair of body electrical systems and vehicle communication systems; and demonstrate proper use of advanced electrical diagnostic equipment.

Course Focus

This course is focused on the study of body electrical systems operation, service, diagnosis and repair. Students will become acclimated to these skills through daily lab assignments and enrichment activities.

Materials

Students are responsible for pen, pencil, paper, supplied course materials, and hand tools on a daily basis. Students will bring to class each day the "required tools" for the automotive program. BHC will provide for student use all special tools, equipment and shop supplies that will be necessary to perform the classroom and lab assignments. Students without tools may be asked to leave class.

Students are encouraged to seek additional materials for enrichment. GM students should seek to assimilate the training available at the STC website at https://www.gmtraining.com/HomePage/LoginPage.asp. This includes TECHAssist, New Model Features, Emerging Issues, Technology Close-ups, Service Know-How videos and seminars in addition to the STC training path.

Also, GM students should become familiar with the GM Service website at http://service.gm.com/index_en-US.html. This site includes links to the electronic service manual, Goodwrench.com, STC, Tech Link on line and the service technician forum. All secured site areas are accessible to ASEP students with the login ID and password provided by the sponsoring dealership. Students should work with their dealership to acquire a personal login ID and password as soon as possible.

Textbooks

The recommended text for this course is:
Additional references will be provided to the students by GMSTC.

**Course Goals**

The following list of course activities will be addressed in the course. These are directly related to the performance objectives. The assignments may be adjusted at any time during the course at the sole discretion of the instructor. Students will be notified if an adjustment is made.

1. demonstrate professionalism

Students in the ASEP are expected by their employers to develop high standards of professional behavior. Therefore, the following list of affective objectives has been developed to help guide students’ professional development. The list will be used to document student performance. A grade will be assigned to students to reinforce the expectation of professional growth.

The student will demonstrate the following behaviors in class and at the dealership. Performance will be satisfactory if the items on the list are adhered to during the duration of the course. Points will be lost for each infraction.

Demonstrate Good Personal Habits

- is punctual
- is prepared
- is attentive
- follows directions
- self-controlled

Exhibit Safe Work Practices

- wears safety glasses
- uses equipment safely
- maintains clean work area
- wears appropriate clothing
- displays caution

Demonstrate Productivity

- keeps busy
- stays on task
- plans work in advance
- works efficiently
- follows procedures

 Demonstrate Quality Work

- consults service manual
- uses proper tools
- uses fender covers
- respects vehicle
- shows concern for quality
2. participate in Blackboard discussion group

The student will participate in Blackboard online discussions. Performance will be satisfactory if the student participates in the Blackboard online discussions and receives a passing grade. The document of record will be the online discussion board grade receive from the instructor.

3. complete online training course components

This is a crucial goal and must be successfully completed in order to receive a passing grade in this course. The student will be allowed references. The student will complete online training course components listed below. Performance will be satisfactory if the courses are completed with a score of 70% or higher. Each course should be completed by the assigned due date and submitted on Blackboard. The document of record will be the student's training history showing course completion and test out score.

Your assignment is to complete the online training requirement located at the GM STC Training Website for course credit. The end of course test or placement test must be completed and submitted for course credit after the training is complete.

19047.20W1 Entertainment Systems 1 - **Due: 01/21/2015**
19047.20W2-R3 Entertainment Systems 2 - **Due: 01/26/2015**
19047.20W3 Entertainment Systems 3 - **Due: 01/28/2015**

18044.22V Diagnostic Strategy for Data Communication - **Due: 01/28/2015**

22048.42W1 GM Safety Systems 1 - **Due: 02/02/2015**
22048.42W2 GM Safety Systems 2 - **Due: 02/04/2015**
22048.42W2 GM Safety Systems 3 - **Due: 02/09/2015**
22048.43W Active Safety System and SRS Diagnostic Exercise - **Due: 02/11/2015**

4. complete course written exams

The student will NOT be allowed references. The student will complete course written exams. Performance will be satisfactory if the exam is completed and the student scores a 70% or better. The document of record will be the completed exams.

- Electrical Components and Operation exam
- Electrical mid-term exam
- Final exam

5. perform electrical diagnosis
The student will be allowed references. The student will be provided tools. The student will perform electrical diagnosis, service and repair. Performance will be satisfactory if the service is performed and the service is consistent with the vehicle manufacturer’s recommendations.

- perform circuit testing
- develop diagnostic charts
- perform system diagnosis

Student Contributions

Each student will need to spend at least 8 hours per week preparing for class. Exemplary grades are earned by competently completing all assignments, being punctual, and in uniform on a daily basis. Students are responsible for being prepared for class. Students should bring with them paper, pen, pencil, text and reference materials to class each day. Students are responsible for having the basic hand tool set available at the college on a daily basis.

This is a performance based course. Student participation is essential. Since one day in this course equates to an entire week in a traditional semester length course, attendance is crucial in this class. An absence is counted for each time a student misses more than 90 minutes of any class session.

Professional behavior is expected from students at all times. Students displaying inappropriate or unprofessional behavior will be asked to cease the behavior. Students continuing to exhibit inappropriate or unprofessional behavior will be asked to leave the class for the duration of the day. Students refusing a direct request from the instructor will be removed by the appropriate authority.

Students involved in cheating, collusion, sharing of answers from class assignments, in possession of any other student’s work, or otherwise acting in an unethical manner will be immediately removed from the class and must be interviewed by the college administration before returning to class and receive a zero (0) on the assignment. Any student acting in an unsafe manner will be immediately removed from the class.

Course Schedule

Class starts at 7:30 a.m. each day Monday through Wednesday and ends at 1:00 p.m. for the duration of the course. Class will meet in room Q-107. The course runs from 01/20/2015 through 02/11/2015.

The drop date for this course is 02/05/2015.

Evaluation

There are five categories of grades in this course. Each category is weighted for final grade calculation as follows. An average score for each category will be derived for final grade calculation.

<table>
<thead>
<tr>
<th>Category</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance</td>
<td>20%</td>
</tr>
<tr>
<td>Online Training</td>
<td>20%</td>
</tr>
<tr>
<td>Discussion Board</td>
<td>20%</td>
</tr>
<tr>
<td>Labs</td>
<td>20%</td>
</tr>
<tr>
<td>Tests</td>
<td>20%</td>
</tr>
</tbody>
</table>
Assignments will be evaluated and assigned a grade. A percentage score will be derived from graded assignments. Each category will be averaged and weighted for final grade calculation. Course average grades will be translated into letter grades as follows:

90 - 100% = A
80 - 89% = B
70 - 79% = C
< 70% = F

Course Policies

SYLLABUS: The syllabus has been created with care to be as accurate as possible. However, the instructor may amend the syllabus to clarify course requirements or add content as needed. Students will be advised of changes as soon as they become available.

CELL PHONES: Please silence all communication devices including cell phones. If you need to make a call or textual communications outside the classroom, please leave the classroom/lab area to place the call or send the message.

FOOD/DRINKS: Food is not allowed in the shop at any time, however, it is permissible to eat and drink in the classroom when class is not in session. You may have drinks available during class, but they should not interfere with class activities and students are responsible for cleaning up any trash or spills. This policy may be rescinded at any time during the semester if the instructor believes the policy is not being followed.

ATTENDANCE: This is a performance based course. Student participation is essential. Since one day in this course equates to an entire week in a traditional semester length course, attendance is crucial in this class. An absence is counted for each time a student misses more than 90 minutes of any class session. A tardy is counted if the student is not in their seat ready to begin when roll is called at the beginning of class including return from periodic breaks. Tardies are counted at 5 points each and an absence is counted at 10 points each.

CLASSROOM BEHAVIOR: Professional behavior is expected from students at all times. It is understood that the instructor sets the standards of acceptable classroom behavior in the class, determines when these standards have been violated, and determines the consequences of that behavior by the student. Students displaying inappropriate or unprofessional behavior will be asked to cease the behavior. Students continuing to exhibit inappropriate or unprofessional behavior will be asked to leave the class for the duration of the day. Students refusing a direct request from the instructor will be removed by the appropriate authority. Safety violations of this policy will result in the immediate dismissal of the student(s) from class.

MAKE UP WORK: "Make up work" is not available. The assignments in this class are determined by a list of performance requirements provided by the manufacturer and from the accrediting body. While lab due dates are flexible, lab time is strictly limited and does not allow for "down time". Students who miss class may not have opportunity to make up lab work due to the limited lab time available. Students who do not complete the required manufacturer's lab activities or online training will jeopardize their successful course completion.

ACADEMIC INTEGRITY: All course work in this class is undertaken with the understanding that academic honesty is the only acceptable behavior. Further, it is understood that the instructor sets the standards of academic honesty in the class, determines when these standards have been violated, and determines the consequences of that behavior by the student. The following instances of academic dishonesty will not be tolerated and if committed, will result in a grade of “F” in the course.

Fabrication – intentional and unauthorized falsification or invention of any information in an academic exercise.
Plagiarism – intentionally representing the words or ideas of another as one’s own in any academic exercise. Collusion – unauthorized collaboration with another person in preparing work offered for credit i.e., providing exam information to another student(s), working collectively on assignments intended as individual tasks.
Cheating – intentionally using or attempting to use unauthorized materials, information or student aids in any academic exercise. Specifically:

- Copying from another student’s test paper or case problem.
- Using test materials or resources not authorized by the person administering the test.
- Collaborating with or seeking aid from another student during a test without permission from the test administrator.
- Knowingly using, buying, selling, stealing, or soliciting, in whole or in part, the contents of an unadministered test.
- The unauthorized transporting or removal, in whole or in part, of the contents of the unadministered test.
- Substituting for another student, or permitting another student to substitute for one’s self, to take a test.
- Bribing another person to obtain an unadministered test or information about an unadministered test.

College Policies

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 the course drop date. 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.

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: Dropping from a Course or Withdrawing from College (https://www1.dcccd.edu/coursedrops).

INTERNAL TRANSFER: A credit student may transfer to non-credit status after the refund period and on or before the final drop date of the semester. No student will be permitted to transfer after that date. Please consult with your instructor if you wish to utilize this transfer process.

STUDENT CODE OF CONDUCT: The purpose of the Student Code of Conduct is to provide guidelines for the educational environment of The Dallas County Community College District. Such an environment presupposes both rights and responsibilities. Disciplinary regulations at the college are set forth in writing in order to give students general notice of prohibited conduct. Students should be aware of disciplinary actions for all forms of academic dishonesty, including cheating, fabrication, facilitating academic dishonesty, plagiarism and collusion. For more information please refer to The Student Code of Conduct page (https://www1.dcccd.edu/catalog/ss/code.cfm).

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. Please note: If you are receiving
Financial Aid grants or loans, you must begin attendance in all classes before the certification date. You also must attend or participate after the drop date in order not to be marked as non-attending in the event that you fail the course. Do not drop or stop attending any class without consulting the Financial Aid Office. Changes in your enrollment level and failing grades may require that you repay financial aid. For more information about financial aid, please contact the Financial Aid office (http://www.brookhavencollege.edu/studentsvcs/financial/).

RELIGIOUS HOLIDAYS: Students desiring to observe a religious holy day, which will result in a class absence, must notify instructors in writing, for each class, no later than the 15th calendar day after the first class day of the semester in which the absence will occur. Students are required, at a time assigned by the instructor, to complete assignments or take examinations which may be missed as a result of the absence.

ADA STATEMENT: Any student who feels that he/she may need any special assistance or accommodation because of an impairment, disability, or handicap, please contact Special Services Office in Room S124 or at 972-860-4847. Information can be found online at Disability Student Services (http://www.brookhavencollege.edu/studentsvcs/special-services/).

RECEIVING YOUR GRADES: End-of-semester grades will not be mailed to you by the college. To receive your 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’.

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