# DE ANZA COLLEGE AUTOMOTIVE TECHNOLOGY A.T. 60K - ADVANCED BODY ELECTRICAL DIAGNOSIS GREENSHEET

## I. Catalog Information

AUTO 60K Advanced Body Electrical Diagnosis 4.5 Units

Advisories: Auto 60A, 60G, English Writing 100B, Reading 100(or Lang Arts 100), or ESL 24 & 72, Math 101 or 112

#### 6:00PM-10:15PM Tues & Thurs

Theory of operation for body electrical, electronic,, and electro-mechanical systems. Understanding the functions of auto body electrical systems. Utilization of special diagnostic equipment for body electrical systems and sub systems. Symptom to system diagnosis. Preparation for Automotive Service Excellence (ASE) exam in area A6

### II. Course Objectives

The student will:

- ${\it 1.}$  Identify individual body electric systems on particular applications.
- 2.Classify the different types of electronic controls used on electronic body systems.
- 3. Define the basic design and operation of particular body systems.
- 4. Distinguish the type of computer data network on a given vehicle.
- 5. Describe the steps needed to diagnose a computer data network when a problem is detected.
- 6. Explain the steps for deactivating the supplemental restraint system (air bags) to safely work on a vehicle.
- 7. Establish techniques for the use of scan tools as applicable to body electrical diagnosis and multiplexing.
- 8, Prepare a "diagnostic plan" for affected circuits.

## III. Essential Student Materials

Safety glasses for lab demonstrations Course packet with PPT and worksheets

## IV. Essential College Facilities

Lecture classroom and automotive laboratory for demonstrations

#### V. Assignments

Reading assignments from handouts

## VI. Methods of Evaluating Objectives

- 1. Objective and written quizzes.
- 2. Activity sheets
- 3. Midterm examination
- 4. Final examination
- 5. Grading standards:

A = 100-90% of total points

B = 89-80% of total points

C = 79-70% of total points

D = 69-60% of total points

F = < 60%

- 6. Attendance per department policy: two absences may be allowed per each 6 week segment.
- 7. STUDENT BEHAVIOR students are expected to abide the policies listed in the current De Anza Schedule of Classes. Student behavior which violates these standards may be cause for removal from this course. Students desiring more information should obtain a copy of the "De Anza College Resource Guide".

#### Classroom and Lab Conduct

- A. Students will be dismissed from class for disruptive behavior per college policy.
- B. Wear safety glasses and work shoes for the duration of labs.
- C. All required tools must remain available for lab

activities.

- D. Students are to remain in assigned areas through cleanup.
- E. There is one 20-minute break between lecture and lab. The instructor will check roll at start of lab.
- F. It is expected that work will be completed with pride and craftsmanship and that students will perform warranty services if necessary. If overtime is required, consider it the equivalent of homework.
- G. Cell phones are to be turned off during the lecture portion of class. I know you are way too addicted to it for it to be turned off for the entire lab as well.

## Security

It is understood that the facility and all within is exposed. It is therefore necessary that each and every student assume responsibility for their own security and that of other students and the department. To this end, observe the following guidelines:

- A. Watch out for fellow students' tools and secure them as well if necessary.
- B. Do not allow strangers to roam lab areas. Ask questions and secure unattended lab areas.
- C. If you unlock a door or cabinet outside of class time, lock it when done.
- D. Do not enter the tool room unless accompanied by your instructor.

#### Parking

Parking permits for use in designated areas are available in the Administration Building. Do not park in any shop space. These are reserved for shop activities. Cars parked improperly are subject to citation or will be moved.

## VII. Texts and Supporting References

A. Text:

Course packet

- B. Manufacturers service manuals as required
- C. Reading Assignments

# IX. Other Related Information

1. Instructor: Rick Maynard

2. Office: E14c

3. Office hour: 5:00 - 5:50 PM

4. Telephone: (408) 864-8704 Office

5. e-mail: maynardrick@fhda.edu

### Calendar of class:

30 June - Start of class

16 July- Mid Term

6 Aug- Final

30 June is the last day to add, drop w/o a "W" or drop w/refund

28 July is the last day to drop with a "W"  $\,$ 

A quiz will be given each Thursday at the end of class