**MAUTEC 311 Basic AUTOMOTIVE SYSTEMS**

**Instructor;** Deven Chew **Required** **Textbook/workbook;**

Office: Auto 123 West Basic Automotive Service & Systems,

Tel. 209 575 -6327 4th edition, Webster/Owen, Delmar.

email. chewd@mjc.edu

**Meeting Dates and Times; Lecture room;** Turlock High Auto

8/25/14 to 12/8/2014 **Laboratory room;** Turlock High Auto

M/W/ 5:30-8:35

**Course Syllabus**

**Course Description**

Basic repair practices of automotive systems to include; cooling, lubrication, fuel, exhaust, and electrical. Proper selection and use ofautomotive shop manuals, charts, service publications, tools, measuring devices, etc. Lecture/laboratory. Materials fee required.

**Student Learning Outcomes**

1. Students successfully completing MAUTEC 311 will demonstrate a basic understanding of basic workshop safety.
2. Students successfully completing MAUTEC 311 will be able to demonstrate a basic understanding of the operating characteristics of major automotive systems

**Obligation of the student**

 1. Maintain a high level of class attendance

 **Absences:** Three absences will result in being dropped from the class.

 **Tardies:** Two tardies equals one absence.

2. Provide themselves with the necessary class supplies and materials, ie. Text and

 workbooks, paper, pencil and 882E scantrons. Any student who has not

 purchased the required Textbook and workbook by the end of week 3 will be

 dropped from the class.

3. Prepare the necessary class assignments so as to be able to participate

 successfully in class activities.

4. Pass a tools test. Failure to pass this test will result in being dropped from the

 class.

5. Participate in class laboratory activities, as assigned, to develop the

 related skills and work habits.

6. Be able to read, write, and comprehend oral and written instructions

 in the English language.

**Student teams**

The class will be divided into teams with each being assigned an engine to perform required lab assignments and practice.

**Course outline**

 a. Shop safety

 b.Tools

 1. Hand

 2. Power

3. Measuring

 c. Fasteners

 1. Threaded fasteners

 2. Non-threaded fasteners

 3. Locking devices

 d. Service Publications

. 1. Service manuals/specification charts

 2. Mitchell On-Demand, Alldata, and Prosis

 e. Introduction to cooling systems

 f. Introduction to lubrication systems

 g. Introduction to fuel systems

 h. Introduction to ignition systems

 i. Introduction to exhaust systems

 j. Automotive electrical fundamentals

 k. Basics of engine mechanical operation

**Safety**

Students will be provided with a shirt and safety glasses. Students must provide work clothes and work shoes. An MJC shirt will be issued.

**SAFETY EYE PROTECTION MUST BE WORN AT** **ALL TIMES IN THE LABORATORY.**

Repeated unsafe safety practices will result in class dismissal.

**Grading methods**

Grading is composed of the following;

 1. 25% -- Unit exams, quizzes.

2. 10% -- Notebook, Lecture & Chapter notes

3. 15% -- Chapter and tech manual review questions.

 (Failure to do required written work may cause student dismissal)

 4. 25% -- Engine projects, laboratory assignment worksheets and laboratory note book. Participation

5. 10% -- Drill and tap project. (Project must be completed in allotted time or student **will** be *dropped* from the class.)

6. 15% -- Final.

These requirements will be used to calculate the final grade.

**General class procedure**

 1. Roll will be taken at the beginning of each class period. Students are expected

 to be present and ready for work at this time with their work clothes on.

 Homework will be collected immediately after roll call, preferably typed, with

 both the questions and answers written in full. Late homework will not

 be accepted. Students are required to have their notebooks, textbook/workbook

 and safety glasses present every period.

 2. Any student leaving class without the instructor's permission will be

 marked absent for the day, and may be dropped from the class.

 3. A student not having proper work clothes, safety equipment, text or workbook

 will be dismissed from class and marked absent. Lockers are available in the

 restrooms for student use. Proper shop clothing is **dark blue work shirt, pants,**

 **and leather work boots.** Levi's will work as pants.Baggy pants, sweat pants,

 work out pants, tank tops,shorts or sandals are not permitted at any time. Shirts

 must be tucked neatly inside pants. The instructor'sdecision on work clothes is

 final. Failure to comply with these requirementswill result in the student being

 dropped from the class.

4. Smoking orthe use of chewing tobacco is **not** permitted in the

 automotive shop, shop complex or within 50’ of the building.

5. Students are not allowed in the lab area without supervision from their

 instructor.

6. No student parking in the automotive complex.

7. Electronic communication devices Cell phones,

**must be turned off** during class. Failure to comply may result in dismissal from class.

8. HORSEPLAY in the shop is **not** allowed at any time, and will be a cause for

 Immediate dismissal.

 (Appeals to any dismissal from class must be made to the Tech. Ed.

 Department Dean. Pedro Mendez

 9. Exams/Quizzes: There are no make up exams. If you are not here to

 take an exam or quiz, for any reason, you missed it.

 CHEATING of any kind will result in a zero on that paper,

 (NO makeup), and an automatic referral to the Tech. Ed. Dept. Dean.

1. The instructor reserves the right to make any adjustments necessary to

 the operation of this course that in his professional judgment are

 warranted to better meet the needs of the students.