

Course Syllabus

1. **Title of Course:** Preventative Maintenance

Prefix/number: ASE **Credit Hours:** 8 CR.
170 / 171

2. **Prerequisite:** None

3. **Resources Needed:**

Text: The Car Care Book

Supplies: Basic Tools, Uniform Shirts, Safety Glasses

4. **Course Description:** Focuses on lecture and related laboratory experiences in basic diagnosis and necessary corrective actions of automotive car care factors.

5. **Course Goal:**

6. **Course Objectives:**

By the end of the course, students will:

- A. Understand Engine operation and verify engine problems
- B. Identify oils and lubricants and perform oil changes
- C. Identify fluid levels and service
- D. Replace spark plugs
- E. Understand coolant mixtures and service
- F. Perform hose inspection and replacement
- G. Perform drive belt inspections and service
- H. Perform charging system inspection
- I. Remove and replace an alternator
- J. Understand Fuels and replace fuel filters
- K. Perform electrical testing
- L. Tire repair and rotation
- M. Identify vehicle lift points
- N. Perform brake inspections
- O. Perform shock and strut inspection
- P. Understand windshield wiper replacement
- Q. Understand basic automotive math (ratios – formulas)

7. Evaluation Procedures:

- 1) There will be a written exam after each unit and a final, during class time and on announced dates. All will be weighted equally, except the final will count double.
- 2) Routine evaluations will be made on an individual basis by the instructor during each lab session.
- 3) There will be a lab final (performance) exam. The score on this exam will be entered twice when computing your final grade.
- 4) Grading will be weighted
 - i. 30% of grade for written assignments
 - ii. 40% of grade for lab assignments
 - iii. 30% of grade for tests
 - iv. One grade point will be deducted from total grade percentage for every hour absent.

GRADING SCALE

Raw score range	Letter grade
90 to 100	A
80 to 89	B
70 to 79	C
60 to 69	D (failing)
0 to 59	F (failing)

Written Assignments 30%	Lab Assignments 40%	Tests 30%
50/50	50/38	100/90
50/38	50/50	100/70
50/50	50/38	100/90
150/138	150/126	300/250

Special Remarks:

- 1 All announced examinations will be made up of multiple choice, completion, True / False and short essay type questions and will be given during regular class periods. Make-up exams will only be given if prior arrangements have been made.
- 2 Attendance: College policy states that students may be dropped from enrollment when absent 20% of scheduled class meetings. If enrolled from the beginning of the term, 15 hours will usually constitute 20% of a four credit semester course which meets five hours per week. Reinstatement procedures are described in the PCC catalog.
- 3 Tardy Policy: A student who is late three times (enters classroom after instructor has taken roll) will be charged with one full absence unless the student can provide valid reasons for one or more of these tardies.
- 4 Assignments/missed exams: It is the student's responsibility, whether present or absent, to obtain all material presented and to complete all course assignments. If prior arrangements are made or extenuation circumstances exist, makeup tests may be allowed. Late homework papers will not be accepted unless those same extenuating circumstances exist. Make up of quizzes is to be at the instructor's discretion.

8. Course Outline:

- 1) **Engines**
 - i. Cylinder Compression
 - ii. Cylinder leakage
 - iii. Timing Belt
 - iv. Oil Changes
 - v. Coolant Systems
 - vi. Drive Belts
 - vii. Spark Plugs and Distributor Wires
 - viii. Fluid Levels
- 2) **Electrical**
 - i. Lighting and accessories
 - ii. Batteries
 - iii. Charging systems
- 3) **Suspension**
 - i. Shocks and Struts
 - ii. Brakes
 - iii. Tires
- 4) **Other Services**
 - i. Windshield wipers
 - ii. Vehicle lift points
 - iii. Basic automotive math

9. Methods of Instruction:

To be successful in this course, students are expected to participate in discussions, readings,, in-class writing and peer review activities. The instructor may assign point values to such activities.

10. Academic Integrity:

The very nature of higher education requires that students adhere to accepted standards of academic integrity. Therefore, Pueblo Community College has adopted a policy of academic conduct as described in the student handbook. Violation of academic integrity may be defined to include the following: Cheating, plagiarism, falsification and fabrication, abuse of academic materials, complicity in academic dishonesty, and personal misrepresentation. It is the student's responsibility to be aware of the behaviors that constitute academic dishonesty. Sanctions for violating the standards of academic integrity may include warning, probation, suspension, and / or failure of the course or assignment at the discretion of the instructor.

11. ADA Notice:

- 1) Any student eligible for and needing academic adjustments or accommodations because of a disability should inform the instructor during the first week of class and provide the instructor with a copy of the letter of accommodation at the beginning of the semester.

Recommended script for instructors for the first day of class

How to Be a Successful Student

Successful students attend classes regularly. Instructors expect regular and punctual attendance and keep a complete record of attendance for the entire length of each course. Students will be counted absent from class meetings missed beginning with the first official date of enrollment.

It is the student's responsibility, whether present or absent, to obtain all material presented and to complete all course assignments. It is the student's responsibility to inform the instructor of the reason for an absence and to do so in a timely manner. Frequent absences will be taken as evidence that students do not intend to complete the course. Students may be dropped according to College procedures as determined by the instructor. However, it is also the students' responsibility to initiate a withdrawal if they do not intend to finish the course; this insures a W instead of an F on the transcript.

The attendance policy for certain programs may differ from the general policy due to clinical requirements or requirements of approving agencies.

Any registered student who does not attend class during the first 10 percent of the class contact hours will be dropped unless special arrangements are made with the instructor. A student dropped as a "no show" will forfeit his/her position in the class.

Please note: The College policy states that students may be dropped after missing twenty percent of a class. The twenty percent is for the ENTIRE length of the class. Students who miss this many classes during the first few weeks of the semester are, in reality, missing MORE than twenty percent of the classes for that time period. Students who miss class are missing important information, assignments and the opportunity to ask questions, gain points, or even contribute to the learning of others. Therefore, it is **very important** for students to attend EVERY class period. **Successful students** do not miss class, just as successful workers do not miss work.

What do you think would keep you from attending every class: illness, car trouble, problems with child care, doctor or court appointments, etc.? What back-up plans could you establish now, at the beginning of the semester in these cases? (For example, **successful students** decide how they would get to class if they have car trouble or child care problems. Plan to make appointments when you do not have class; instructors do this routinely.) Never miss a class to do homework or study for an exam; this is not a legitimate excuse – you are just falling farther behind!

Realize that college is difficult and not always "fun." **Successful students** may struggle at times or even lack the motivation to attend class – but the key is that they DO find ways to overcome these obstacles: they DO complete assignments on time, and they DO attend classes regularly.

Also have back up plans for getting assignments in if you are absent. Plan to drop off papers to the instructor, the administrative assistant, or The Learning Center. Some assignments may be e-mailed to the instructor. Keep in mind that instructors may take off points for (or not accept) late work. Some instructors **may** allow make-up tests, but at the instructor's discretion, these may be more difficult, or points may be taken off. It is the student's obligation to know the guidelines for each course as stated in the syllabus and announced by the instructor.

Successful students also do their own work (with the help and guidance of the instructor or official tutors if need be). They do not "plagiarize" (copy) the work of others. Intentional plagiarism may result in an F for the course and documentation in the student's college record. When in any doubt about using the work of others (as in a researched assignment), be sure to consult with the instructor.