

COCONINO COMMUNITY COLLEGE

COURSE OUTLINE

Prepared by: Dr. Pattie Odgers
Revised by: Joe Costion
Status: Permanent

Date: May 8, 1992
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A. Identification:

1. Subject Area: Auto Mechanics
2. Course Number: AUT 100
3. Course Title: AUTOMOTIVE BASICS
4. Credit Hrs: 3
5. Catalog Description:

Basic automotive knowledge as it relates to owner/operator of an automobile or light truck. It will give the student an understanding of systems and maintenance. Two lecture, two lab.

B. Course Goals:

To provide the student with information and skills for understanding and maintaining their car. To examine systems used on different makes of cars and to emphasize the maintenance and understanding of systems as they pertain to the modern car.

C. Course Outcomes:

Students will:

1. Gain a working knowledge of automotive systems.
2. Gain a working knowledge of maintenance procedures.
3. Gain techniques in diagnosing problems, associated with automotive systems.
4. Develop appreciation of a good piece of equipment.
5. Acquire techniques in the reading of automotive literature.

D. Course Content:

Will Include:

1. What makes the wheels go round.
 - a. converting heat energy to motion.
 - b. the engine as a group of systems
 - c. brakes
 - d. steering
 - e. suspension
2. Tooling up
 - a. awareness
 - b. level of commitment
 - c. basic maintenance
 - d. basic mechanical tools
 - e. minor repairs
 - f. electrical, ignition and fuel systems.
3. The engine
 - a. automotive engines

- b. multiple - cylinder
- c. routine engine maintenance
- d. engine problems
- 4. The fuel system
 - a. gasoline
 - b. fuel tank
 - c. fuel pump
 - d. fuel filter
 - e. fuel system maintenance
- 5. The electrical system
 - a. battery
 - b. battery maintenance
 - c. starting system
 - d. charging system
 - e. Ignition system
 - f. lights and accessories
 - g. electrical system problems
- 6. Lubrication and cooling systems
 - a. lubrication system
 - b. cooling system
 - c. lubrication maintenance
 - d. cooling system maintenance
- 7. The drive train
 - a. drive train operation
 - b. front wheel drive
 - c. rear wheel drive
 - d. four wheel drive
 - e. drivetrain maintenance
- 8. Tires, brakes, suspension, and steering.
 - a. tires
 - b. brakes
 - c. suspension
 - d. steering
 - e. maintenance of systems
- 9. Heating, air conditioning, and optional equipment.
 - a. accessories
 - b. heating systems
 - c. air conditioning
 - d. optional equipment
- 10. Your maintenance program
 - a. importance of maintenance
 - b. daily maintenance
 - c. weekly maintenance
 - d. monthly maintenance
 - e. seasonal maintenance
- 11. A look at "do-it-yourself" repairs
 - a. need for repairs
 - b. should you do it yourself

- c. repairing systems
 - d. tire maintenance
12. Fit-it/Dump it decision
- a. understand motives
 - b. evaluate maintenance & repair cost
 - c. set your budget
 - d. understand impact of your decision
13. Buying tips for parts, care, insurance
- a. buying parts
 - b. buying new cars
 - c. buying used cars
 - d. leasing cars
 - e. buying insurance