

PALOMAR COLLEGE
COURSE OUTLINE OF RECORD FOR
DEGREE CREDIT COURSE

 X Transfer Course X A.A. Degree Applicable Course
(check all that apply)

COURSE NUMBER AND TITLE: AT 140 Front Drive Transmissions

UNIT VALUE: 4 **MINIMUM NUMBER OF SEMESTER HOURS:** 96

BASIC SKILLS REQUIREMENT: Appropriate language and computational skills.

ENTRANCE REQUIREMENTS:

PREREQUISITE: None.

COREQUISITE: None.

RECOMMENDED PREPARATION: None.

SCOPE OF COURSE:

Training in recent production of import and domestic front drive power trains including manual transmission, automatic transmission, differential systems, and drive axles.

SPECIFIC COURSE OBJECTIVES:

Students will:

1. Apply principles of shop safety.
2. Identify front-drive power systems.
3. Explain operation for manual front-drive transaxles.
4. Explain operation of automatic front-drive transaxles.
5. Analyze front drive transaxle operation problems.

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

- I. Front Drive Transmission Removal and Replacement

- II. Diagnosis of Problem Areas
- III. Bench Overhaul of Specific Units
 - A. General Motors 125, 325, 440T4
 - B. Chrysler Current Models
 - C. Ford ATX, AXOD
 - D. Imports
 - 1. Honda
 - 2. Datsun
 - 3. Subaru
 - 4. Volkswagen
 - 5. Toyota

IV. Drive Shaft Service

REQUIRED READING:

Automatic Transmissions & Transaxles. 3rd ed. Sunnyvale, CA: Check Chart Publications, 1997.

SUGGESTED READING:

ATRA Pamphlets. Ventura, CA: Automatic Transmission Rebuilders Association, 1994.

REQUIRED WRITING:

Report on assigned transmission of approximately 500 words. Report shall include the description of:

1. Parts principles
2. Diagnosis procedure
3. Information required for overhaul
4. Selected experience interviews
5. List of necessary parts - time line

OUTSIDE ASSIGNMENTS:

Students are expected to spend a minimum of three hours per unit per week in class and on outside assignments, prorated for short term classes.

Visit local repair facilities to learn the job requirements of the transmission industry. Should spend 2-4 hours at the facility.

INSTRUCTIONAL METHODOLOGY:

Check all that apply:

- lecture
- laboratory
- lecture-laboratory combination
- directed study

This course may be offered as a distance education course and meets Title 5 regulations 55370, 55372, 55374, 55376, 55378, and 55380.

Yes No

If yes, check all that apply. (See guidelines for preparation for definitions.)

- telecourse
- mediated instruction
- computer assisted instruction

GRADING POLICY AND STANDARDS: (include methods for determining whether the stated objectives have been met by students):

Tests on Instruction Units	40%
Lab Practice, Diagnosis and Participation	60%

IS COURSE REPEATABLE FOR REASON(S) OTHER THAN DEFICIENT GRADE ?

Yes No Number of times course may be taken for credit: 1.

If yes, identify specific provision of Title 5 Division 2 section(s) 55761-55763 and 58161 which qualifies course as repeatable:

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SIGNATURES:

SIGNATURES ON FILE