

Master Syllabus

AUT 1142 - Automotive Manual Transmission & Driveline

Division: Science, Mathematics and Engineering

Department: Automotive Technology

Credit Hour Total: 3.0

Lecture Hrs: 1.4 **Lab Hrs:** 4.8

Date Revised: October 2013

Course Description:

Theory and operation of clutch, manual transmission and transaxle, rear axle, limited slip differential, drive shaft, universal joint, four-wheel drive/all-wheel drive, diagnosis and repair. Basic hand tools required. One classroom, six lab hours per week.

General Education Outcomes:

- Critical Thinking/Problem Solving
- Information Literacy

Course Outcomes:

Axles and Differentials

Identify components and proper procedures for axle and differential service and repair.

Assessment Method: Locally developed exams

Performance Criteria: 70% correct responses on exam

Driveshafts and Universal Joints

Perform procedures for driveshaft and universal joint service and repair.

Assessment Method: Locally developed exams

Performance Criteria: 70% correct responses on exam

Four Wheel Drive and All Wheel Drive

Perform service procedures for four wheel drive and all wheel drive service and repair.

Assessment Method: Locally developed exams

Performance Criteria: 70% correct responses on exam

Clutches

Identify components and proper procedures for clutch service and repair.

Assessment Method: Locally developed exams

Performance Criteria: Score 70% correct on written exam

Assessment Method: Performance appraisals

Performance Criteria: Score at least 2 on a 4-point rubric

Manual Transmissions and Transaxles

Identify components and proper procedures for transmission and transaxle service and repair.

Assessment Method: Locally developed exams

Performance Criteria: 70% correct responses on a written exam

Outline:

Clutches
Manual Transmissions/Transaxles
Differentials
Axles
Driveshafts
Universal Joints
Four Wheel Drive/All Wheel Drive