AUTO 1001

Division: Career and Technical Education
Department: Transportation Technology
Course: AUTO 1001
Title: Automotive Technology I
Catalog Description:

This course covers careers in the Automotive Industry, ASE Certification, and the principles of fuels, lubricants, engines, engine classification, displacement, cooling systems, belts, intake, and exhaust systems.

General Education Requirements: N/A
Semesters Offered: TBA
Credit/Time Requirement: Credit: 6; Lecture: 4; Lab: 6
Clock/Hour Requirements: 150
Offered for Non-Credit: Yes
Prerequisites: None

Corequisites: None

Justification:

This course is approved by the program advisory committee and prepares students for Automotive Service Excellence (ASE) certification.

Student Learning Outcomes:

Upon successful completion of this course, students will be able to:

- describe the composition and use of fuels and lubricants
- describe engine principles and maintenance procedures
- describe engine cooling systems and maintenance procedures
- prepare to take and pass the ASE Certification.

Content:

Course objectives will be accomplished by providing students with learning experiences in the following subject areas:

- fuels and lubricants
- engine performance

- cooling system repair

General Education Outcomes:

1) Read effectively, constructively, and critically.

Students will read the required text, shop manuals, and reference materials, as well as other assigned readings.

Students must be able to answer questions on exams and synthesize information into laboratory experiences.

4) Retrieve, evaluate, interpret, and deliver information through a variety of traditional and electronic media.

Students will utilize electronic and written reference manuals and computer diagnostics to identify, troubleshoot, and repair engines, transmissions, brakes, and other vehicle components.

Key Performance Indicators:

Student Learning Outcomes will be assessed by two or more of the following Key Performance Indicators:

- oral tests
- chapter classroom assignments.
- written tests
- practical application of theoretical skills
- student feedback as per ASE requirements
- students transferring to other post secondary institutions
- student performance in subsequent courses

Representative Text and/or Supplies:

- Time Gilles, *Automotive Service,* current edition, Thomson/Delmar Learning.
- Instructional materials as directed by instructor

Optimum Class Size: 10
Maximum Class Size: 18

Signatures:

I hereby submit this course syllabus:

Brent Reese, BS, Associate Professor

I hereby find this course consistent with the goals and resources of the Transportation Technology Department:

Brent Reese, BS, Associate Professor, Chair

I hereby find this course consistent with the goals and resources of the Career and Technical Education Division:

Michael P. Medley, MBA, Assistant Professor, Dean

I have discussed the need for library resources related to this class with the person submitting the syllabus:

Lynn Anderson, MLIS, Technical Services Librarian (Main Campus)

Michelle Olsen, MLS, Campus Librarian (Richfield Campus)