

SAN DIEGO COMMUNITY COLLEGE DISTRICT
CONTINUING EDUCATION
COURSE OUTLINE

SECTION I

SUBJECT AREA AND COURSE NUMBER

AUTO 600

COURSE TITLE

QUICK SERVICE LUBE, PRE-DELIVERY INSPECTION TECHNICIAN

TYPE COURSE

NON-FEE

VOCATIONAL

CATALOG COURSE DESCRIPTION

This course provides students with an overview of automotive quick services and new/used vehicle preparation. It covers vehicle inspections, preparing estimates, changing fluids and filters, proper hazardous waste disposal, minor electrical repairs, and road-testing techniques. Students learn how to inspect and evaluate vehicle systems to determine if advanced levels of repairs are needed. They also learn how to identify and operate necessary equipment and tools. (FT)

LECTURE HOURS

36

LABORATORY HOURS

72

ADVISORIES

Valid California Driver's License.

RECOMMENDED SKILL LEVEL

Eighth grade reading level, ability to communicate effectively in the English language and knowledge of general math.

INSTITUTIONAL STUDENT LEARNING OUTCOMES

1. Social Responsibility
SDCE students demonstrate interpersonal skills by learning and working cooperatively in a diverse environment.
2. Effective Communication
SDCE students demonstrate effective communication skills.

INSTITUTIONAL STUDENT LEARNING OUTCOMES (CONTINUED)

3. Critical Thinking
SDCE students critically process information, make decisions, and solve problems independently or cooperatively.
4. Personal and Professional Development
SDCE students pursue short term and life-long learning goals, mastering necessary skills and using resource management and self advocacy skills to cope with changing situations in their lives.

COURSE GOALS

To provide instruction in the operational theory of today's automobiles and their systems; to develop problem solving techniques in order to diagnose various automotive problems; to enhance the students' reading, writing, math and communication skills so they may interact successfully with employers and customers; and to provide work experience in a simulated work environment representative of those encountered in the automotive repair industry today.

COURSE OBJECTIVES

Upon successful completion of the course the student will be able to:

1. Identify tasks, tools, and products related to quick services
2. Perform accurate inspections for safety-related defects, needed repairs, and signs of collision repairs or damage
3. Provide proper calculations, documentation, and notes of inspections
4. Road test vehicle and function test vehicle systems for proper operation
5. Perform services, inspections, and minor repairs safely, correctly, and in a timely manner

SECTION II

COURSE CONTENT AND SCOPE

The following topics are included in the framework of the course but are not intended as limits on content. The order of presentation and relative emphasis will vary with each instructor.

1. Preparation
 - 1.1. Tools and equipment
 - 1.2. Repair orders and BAR rules
 - 1.3. Types of fluids
 - 1.4. Climate considerations
 - 1.5. Safety considerations
 - 1.6. HazMat regulations
 - 1.7. Parts requirements.

COURSE CONTENT AND SCOPE (CONTINUED)

2. Tasks
 - 2.1. Fluid changes
 - 2.2. Filter replacement and installation
 - 2.3. Fluid refills
 - 2.4. Drain and fill plug installation
 - 2.5. Chassis lubrication
 - 2.6. Body component lubrication
 - 2.7. Fluid top-off
 - 2.8. Minor electrical repairs
 - 2.9. Minor mechanical repairs.
3. Vehicle inspections
 - 3.1. Pre-delivery inspections (new and used)
 - 3.2. Techniques
 - 3.3. Under-hood inspections
 - 3.4. Under-car/chassis inspections
 - 3.5. PDI/safety inspection sheets
 - 3.6. Repair order notations
 - 3.7. Safety check: lights, horn, wipers, mirrors
 - 3.8. Tires
4. Road tests
 - 4.1. Gauges and warning lights
 - 4.2. HVAC function test
 - 4.3. Windows and locks/latches
 - 4.4. Seat position controls
 - 4.5. Safety belts/SRS
 - 4.6. Performance/drivetrain
 - 4.7. Braking
 - 4.8. Handling
 - 4.9. Steering and tracking.

APPROPRIATE READINGS

Reading assignments are required and may include but, are not limited to, the following:

1. Course text(s)
2. Articles from magazines and trade publications
3. Internet sites related to automotive technology
4. Manufacturer service information and bulletins

WRITING ASSIGNMENTS

Writing assignments are required and may include, but are not limited to, the following:

1. Completing assigned reports.
2. Providing written answers to critical inquiries based on assigned reading.
3. Maintaining a class notebook.

WRITING ASSIGNMENTS (CONTINUED)

4. Completing a 500-word essay related to automotive quick services and new/used vehicle preparation.

OUTSIDE ASSIGNMENTS

Outside assignments may include, but are not limited to, the following:

1. Conducting research and preparing reports.
2. Preparing written assignments.
3. Attending and reporting on automotive shops and events.

APPROPRIATE ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING

Critical thinking assignments are required and may include, but are not limited to, the following:

1. Performing arithmetic calculations.
2. Analyzing and evaluating reading assignments and classroom materials.
3. Calculating and preparing a vehicle inspection/repair estimate using typical industry practices.

EVALUATION

A student's grade will be based on multiple measures of performance unless the course requires no grade. Multiple measures may include, but are not limited to, the following:

1. Manipulative skills to operate basic automotive tools and equipment.
2. Performance on written, oral, or practical exams.
3. Contributions to class discussions.
4. Performance on out-of-class assignments.
5. Utilization of safety procedures and policies.

Upon successful completion of this course a Certificate of Course Completion will be issued. Upon successful completion of all courses included in the program, a Certificate of Program Completion will be issued.

METHOD OF INSTRUCTION

Methods of instruction may include, but are not limited to, the following:

Lecture, Laboratory, Computer Assisted Instruction, Audio-Visual, Job Shadowing, Guest Speakers and Field trips.

This course, or sections of this course, may be offered through distance education.

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TEXTS AND SUPPLIES

Textbooks may include, but are not limited to:

TEXTBOOKS:

Automotive Technology: Principles, Diagnosis, and Service, James D. Halderman and Chase D. Mitchell, current edition, Prentice-Hall

Fundamentals of Automotive Technology: Principles and Practice Second Edition, Kirk VanGelder, or current edition, CDX

SUPPLIES:

Manufacturer training materials.

PREPARED BY: Jane Signaigo-Cox DATE: April 22, 2008

REVISED BY Instructional Services/SLO's Added DATE July 17, 2014

REVISED BY: Bryan Perrin DATE: April 15, 2020

Instructors must meet all requirements stated in Policy 3100 (Student Rights, Responsibilities and Administrative Due Process), and the Attendance Policy set forth in the Continuing Education Catalog.

REFERENCES:

San Diego Community College District Policy 3100
California Community Colleges, Title 5, Section 55002
Continuing Education Catalog