

COURSE OUTLINE

OXNARD COLLEGE

- I. Course Identification and Justification:
- A. Proposed course id: AT R048
Banner title: Smog Check Procedures
Full title: Smog Check Procedures

Previous course id: AT R048
Banner title: Smog Check Procedures
Full title: Smog Check Procedures
 - B. Reason(s) course is offered:
Students who successfully complete this course will have met the California Bureau of Automotive Repair's training requirements to qualify to sit for the smog check inspector licensing
 - C. Reason(s) for current outline revision:
5 year update text only
 - D. C-ID:
 - 1. C-ID Descriptor:
 - 2. C-ID Status: Not Applicable
 - E. Co-listed as:
Current: None
Previous:
- II. Catalog Information:
- A. Units:
Current: 3.00
Previous: 3.00
 - B. Course Hours:
 - 1. In-Class Contact Hours:
Lecture: 52.5 Activity: 0 Lab: 0
 - 2. Total In-Class Contact Hours: 52.5
 - 3. Total Outside-of-Class Hours: 105
 - 4. Total Student Learning Hours: 157.5
 - C. Prerequisites, Corequisites, Advisories, and Limitations on Enrollment:
 - 1. Prerequisites
Current:
Previous:

2. Corequisites

Current:

Previous:

3. Advisories:

Current:

AT R033: Automotive Emission and Fuel Control Systems

AT R013: Automotive Engine Performance or

AT R013L: Automotive Engine Performance Lab or

Previous:

AT R013: Automotive Engine Performance or

AT R013L: Automotive Engine Performance Lab or

AT R033: Automotive Emission and Fuel Control Systems

4. Limitations on Enrollment:

Current:

Previous:

D. Catalog description:

Current:

This course will provide students with the knowledge, skills, and abilities needed to perform smog check inspections. Students who successfully complete this course will have met the California Bureau of Automotive Repair's training requirements to qualify to sit for the smog check inspector licensing examination.

Previous, if different:

E. Fees:

Current: \$ None

Previous, if different: \$

F. Field trips:

Current:

Will be required: []

May be required: [X]

Will not be required: []

Previous, if different:

Will be required: []

May be required: []

Will not be required: []

G. Repeatability:

Current:

A - Not designed as repeatable

Previous:

A - Not designed as repeatable

H. Credit basis:

Current:

Letter graded only [X]

Pass/no pass []

Student option []

Previous, if different:

Letter graded only []

Pass/no pass []

Student option []

I. Credit by exam:

Current:

Petitions may be granted: []

Petitions will not be granted: [X]

Previous, if different:

Petitions may be granted: []

Petitions will not be granted: []

III. Course Objectives:

Upon successful completion of this course, the student should be able to:

- A. Describe and demonstrate personal, shop, equipment, and vehicle safety practices.
- B. Describe the laws, regulations, and procedures associated with consumer
- C. Describe the standards of practice expected of smog check inspectors. Perform smog check emission tests on various vehicles.
- D. Perform smog check visual inspections on various vehicles.
- E. Perform smog check functional tests on various vehicle designs.

IV. Student Learning Outcomes:

- A. Students will demonstrate how to verify that a given vehicle has all the required smog control systems as required by the State of California, bureau of automotive repair.
- B. Students will be able to demonstrate their ability to identify, retrieve, and apply basic automotive technical information including but not limited to online information.
- C. Student will be able to correctly determine a vehicle has reached proper operating temperature.

V. Course Content:

Topics to be covered include, but are not limited to:

- A. Safety
 1. Personal
 2. Shop
 3. Equipment
 4. Vehicle
- B. Program Overview
- C. Standards of practice/station
- D. Program administration
 1. Laws and regulations
 2. Station requirements
 3. Inspector requirements
 4. Technician requirements
 5. Station operation
 6. Station audits
 7. Repair assistance and cost waivers
 8. Referee services
- E. Consumer authorization
 1. Estimates

- 2. Invoices
- F. Vehicle Identification
 - 1. Affected vehicles
 - 2. Exempted vehicles
 - 3. Directed vehicles
 - 4. Certification type
 - 5. Specially constructed vehicles
 - 6. Military personnel
 - 7. Fleet vehicles
 - 8. Emissions inspection system vehicle entries
- G. Calibration of inspection equipment and devices
 - 1. Equipment maintenance
 - 2. Emissions inspection system
 - 3. Low pressure fuel evaporation tester
- H. Visual inspection procedures: gasoline and diesel
 - 1. Pass fail criteria (tampered, defective)
 - 2. Vehicle emissions control label information
 - 3. BAR referee label
 - 4. Aftermarket parts label
 - 5. Crankcase emission controls
 - 6. Evaporative emission controls
 - 7. Thermostatic air cleaner
 - 8. Air injection systems
 - 9. Ignition spark controls
 - 10. Exhaust after treatment systems
 - 11. Exhaust gas recirculation systems
 - 12. Liquid fuel leak inspection
 - 13. Other engine and emission control systems
 - 14. Gasoline visible smoke test
 - 15. Diesel visible smog test
 - 16. Emissions inspection system entries
- I. Emission test procedures
 - 1. Safety precautions
 - 2. Test applications
 - 3. Vehicle preconditioning
 - 4. Acceleration simulation mode
 - 5. Two-speed idle
- J. Functional inspection procedures
 - 1. Test application
 - 2. Malfunction indicator light
 - 3. OBDII
 - 4. Ignition timing
 - 5. Exhaust gas recirculation system
 - 6. Fuel cap integrity
 - 7. Low pressure fuel evaporative test (LPFET)
 - 8. Emission inspection system
- K. Smog check inspection results
 - 1. Vehicle inspection report
 - 2. Vehicle passes inspection
 - 3. Vehicle fails inspection

VI. Lab Content:
None

- VII. Methods of Instruction:
Methods may include, but are not limited to:
- A. Lecture on State smog laws, regulations, and inspection procedures
 - B. Instructor-guided review of smog check failure vehicles
 - C. Instructor led demonstrations of smog testing equipment
 - D. Class discussions with worksheets about legal work order forms
 - E. Worksheet based review of test procedures set by the Bureau of Automotive Repair

- VIII. Methods of Evaluation and Assignments:
- A. Methods of evaluation for degree-applicable courses:
Essays [X]
Problem-solving assignments (Examples: Math-like problems, diagnosis & repair) [X]
Physical skills demonstrations (Examples: Performing arts, equipment operation) [X]

For any course, if "Essays" above is not checked, explain why.

- B. Typical graded assignments (methods of evaluation):
 1. Written reports and repair orders will be required as it relates to performing a smog inspection up to the standards of the California Bureau of Automotive Repair.
 2. Students will be evaluated on their ability to problem solve hypothetical and real vehicle emission control and OBD II failures on examinations.
 3. Students will analyze the vehicle's data stream to solve emission and drivability problems, their performance will be evaluated and graded by the instructor.
- C. Typical outside of classroom assignments:
 1. Reading
 - a. Weekly reading assignments will be assigned from the adopted text and handout materials.
 2. Writing
 - a. Written reports and repair orders will be required.
 - b. Problem solving: Students will use learned skills to problem solve hypothetical and real vehicle emission control and OBD II failures. Students will analyze the vehicle's data stream to solve emission and drivability problems.
 3. Other
 - a. Research: Service manuals and computer information will be used to research vehicle information.
 - b. Field trips: Local automotive smog check facilities to observe a smog check inspection in progress.

- IX. Textbooks and Instructional Materials:
- A. Textbooks/Resources:
 1. n/a (2017). *Bureau of Automotive Repair. Smog Check Reference Guide, Bureau of Automotive Repair, 2012 State of California.*
 2. none (2018). *Bureau of Automotive Repair. Write It Right, Bureau of Automotive Repair, 2013 State of California.*
 3. none (2017). *Automotive Laws and Regulations, State of California, 2013 State of California.*
 4. none (2016). *Smog Check Inspection Procedures Manual, Bureau of Automotive Repair, 2013 State of California.*

B. Other instructional materials:

X. Minimum Qualifications and Additional Certifications:

A. Minimum qualifications:

1. Automotive Technology

B. Additional certifications:

1. Description of certification requirement:

California Emissions Test & Repair License. California Emissions Test only license ASE A6,A8, & L1 certificates

2. Name of statute, regulation, or licensing/certification organization requiring this certification:

XI. Approval Dates

Curriculum Committee Approval Date: 10/10/2018

Board of Trustees Approval Date: 10/10/2018

State Approval Date:

Catalog Start Date: Fall 2019

XII. Distance Learning Appendix

A. Methods of Instruction

Methods may include, but are not limited to:

B. Information Transfer

Methods may include, but are not limited to:

Course ID: 2569