

AUT 114 SAFETY & EMISSIONS INSPECTION

COURSE DESCRIPTION:

Prerequisites: None

Corequisites: None

This course covers the laws, procedures and specifications needed to perform a North Carolina State Safety and Emissions inspection. Topics include brake, steering and suspension, lighting, horn, windshield wiper, tire, mirrors, and emission control devices inspection. Upon completion, students should be able to perform complete and thorough North Carolina State Safety and Emissions inspections. Course Hours Per Week: Class Hours 1; Lab Hours 2; Semester Hours Credits 2.

SAFETY DISCLAIMER:

Automotive work presents many hazards. A moment's carelessness can cause injury to oneself or to others. Such mishaps can occur quickly due, in part, to the nature of the industrial tools used in automotive work. The weight of automobiles and the equipment used to fix them can even cause fatal injuries. Therefore, great care must always be taken in checking out equipment before use, and in using that equipment to work on automobiles.

As we work to insure the safety of everyone in the DTCC automotive lab, it is the instructor's responsibility to introduce students to equipment and to advise them on its safe operation. Those health and safety procedures are also presented in each textbook for each course in the automotive program. **Students are responsible for mastery of that safety information.** DTCC holds each student in every class responsible for reading and applying all of the information regarding personal and public safety and personal and public health in the required text.

While working in the DTCC automotive lab, safety glasses must be worn by everyone. However, safety glasses are only one small requirement so that students remain injury free. All safety recommendations in the text book and from the instructor must be followed. A student with any questions about a safety procedure should immediately ask an instructor for clarification.

Any student using equipment in the automotive lab must be responsible for using that equipment in a safe manner. Durham Technical Community College holds each student in automotive classes responsible for acting to ensure a safe environment and to ensure both the student's own safety and the safety of his classmates.

LEARNING OUTCOMES:

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

- a. Understand the rules pertaining to North Carolina state inspections.
- b. Perform a North Carolina State Safety Inspection.
- c. Perform a North Carolina State Emission Inspection

OUTLINE OF INSTRUCTION:

- I. General Information and Requirements
 - A. Definitions
 - B. Licensing of Safety or Emissions Inspection Stations
 - C. Stations
 - D. Technician Requirements
 - E. Licensing Requirements
 - F. Denial of License
 - G. Suspension or Revocation
 - H. Operation of Inspection Stations
 - I. Inspection Stickers
 - J. Pre-Inspection Requirements
 - K. State Inspection Grading Items
 - L. Emissions Components Tampering Check
 - M. Safety and Emission Equipment Inspection Results.
 - N. Sticker Procedures
 - O. Inspection Failure
 - P. Reinspection

- II. Inspection Procedure for Safety Equipment
 - A. Brakes
 - B. Lights
 - C. Horn
 - D. Steering Mechanism
 - E. Windshield Wiper
 - F. Directional Signals
 - G. Tires
 - H. Tire Definitions
 - I. Mirrors
 - J. Exhaust Emission Controls
 - K. Emissions Control Devices

- III. Inspection Procedure for Emissions Equipment
 - A. Exhaust Emission Controls
 - B. Emissions Control Devices
 - C. Inspection Procedures for Exhaust Emissions Analyzer
 - D. Inspection Procedures for OBD

- IV. Inspection Procedure for Motorcycles
 - A. Safety Inspection of Motorcycles

- V. Additional Lighting Required on Certain Vehicles
 - A. Additional Lighting Requirements

- VI. Investigation/Audits Safety or Emissions Inspection Stations
 - A. Investigation/Audits/Safety or Emissions Inspection Stations

VII. Windshield Replacement

- A. License to Replace Windshield Inspection Stickers
- B. Denial/Suspension or Revocation of a Registered Windshield Replacement Business
- C. Operation To Replace Windshield Inspection Stickers

VIII. Emissions Waivers

- A. Approval and Disapproval of Vehicles
- B. Waivers from Emissions Test Requirements
- C. Waivers from Safety Test Requirements

IX. Window Tinting

- A. Specifications

X. Penalty Schedule for Licensed Safety Inspection Stations

- A. Type I Safety Violations
- B. Type II Safety Violations
- C. Type III Safety Violations

XI. Penalty Schedule for Licensed Safety/Emission and Safety/Emission/OBD Inspection Stations

- A. Type I Emissions Violations
- B. Type II Emissions Violations
- C. Type III Emissions Violations

XII. Missing Emissions Stickers

- A. Penalty for Missing Emissions Stickers

XIII. Infractions and Criminal Offenses for Violations of Inspection Requirements

XIV. OBD Rollout Schedule

XV. Forms

REQUIRED TEXTBOOKS AND MATERIALS:

To be announced by the instructor.

NATEF: Not a NATEF Requirement.