COURSE SYLLABUS

ABT 103 Auto Body Work Environment and Safety

CREDIT HOURS: 4.00

CONTACT HOURS: 60.00

COURSE DESCRIPTION:
Safety in any industry is paramount and this class covers environmental, safety, OSHA and other critical laws and regulations in the auto body paint and refinishing industry. Hazardous warning information for products used in auto refinishing is discussed as well as the proper use of personal protective equipment, the correct use of tools and equipment in the shop and customer safety obligations.

PREREQUISITES:
ABT 101

EXPECTED COMPETENCIES:
Upon completion of this course, the student will be familiar with:

1. Describe the automotive body industry and its related safety issues in specifics demonstrating a firm understanding shop safety dynamics and culture
2. Identify protective clothing and equipment and their proper use; proper shop behavior; principles of fire safety; and federal regulations concerning hazardous material and shop safety.
   - Describe how to select individual personal protective clothing and equipment.
   - Identify the dangers of improper behavior in the shop.
   - Identify the importance of proper grooming and hygiene.
   - Identify the classes of fires and the types of fire extinguishers.
   - Identify general fire emergency procedures.
   - Identify the Occupational Safety and Health Administration (OSHA) regulations.
   - Identify the Environmental Protection Agency (EPA) regulations.
   - Identify the safe use of shop equipment following Environmental Protection Agency (EPA) and Occupational Safety and Health Act (OSHA) regulations
3. Indicate an awareness of safety precautions in Painting and Refinishing
   - Identify and take necessary precautions with hazardous operations and materials according to federal, state and local regulations.
   - Identify safety and personal health hazards according to OSHA Guidelines and the “Right to Know Law.”
   - Inspect spray environment and equipment to ensure compliance wioth federal, state and local regulations and for safety and cleanliness hazards
   - Select and use a NIOSH approved air purifying respirator. Inspect condition and ensure fit and operation. Perform proper maintenance in accordance with OSHA Regulation 1910.134 and applicable state and local regulation.
Select and use a NIOSH approved supplied air (Fresh Air Make-up) respirator. Perform proper maintenance in accordance with OSHA Regulation 1910.134 and applicable state and local regulation.

Select and use the proper personal safety equipment for surface preparation, spray gun and related equipment operation, paint mixing, matching and application, paint defects and detailing (gloves, suits, hoods, eye and ear protection, etc.).

4. Identify and explain the safe and proper use of chemicals
   o Identify the types and uses of solvents.
   o Identify the types and uses of soaps and cleaning solutions.
   o Identify the types and uses of oils.
   o Identify the types and uses of greases.
   o Identify the types and uses of specialty additives.
   o Identify the types and uses of specialty chemicals.
   o Describe the five general rules for using automotive chemicals.
   o Identify gasses and the hazards they present.
   o Identify the hazards of asbestos dust.

5. Identify and explain the safe and proper use of power tools and shop equipment
   o Identify the types and uses of pneumatic, hydraulic, and electric power tools.
   o Identify the hazards of power tools.
   o Identify the types, purposes, and safety considerations of common shop equipment.

ASSESSMENT METHODS:
Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

GRADING SCALE:
90%–100% = A
80%–89.9% = B
70%–79.9% = C
60%–69.9% = D
<60% = E