Introduction to Auto Body and Estimating

Career Cluster	Transportation, Distribution & Logistics
Course Code	20124
Prerequisite(s)	None
Credit	0.5 to 1
Program of Study and Sequence	Foundation Course – Cluster Course **– Introduction to Auto Body and Estimating** – Auto Body Non-Structural Analysis and Damage Repair or Auto Body Structural Analysis and Damage Repair
Student Organization	SkillsUSA
Coordinating Work-Based Learning	Field Trips, Youth Internships, Industry Speakers
Industry Certifications	ASE (Automotive Service Excellence) OSHA (Occupational Safety and Health Administration) 10
Dual Credit or Dual Enrollment	NA
Teacher Certification	Transportation, Distribution & Logistics Cluster Endorsement; Autobody Technology Pathway Endorsement; *Autobody Technology
Resources	

Course Description:

This course is designed to expose the students to different industry terminology, safety practices, auto body estimating and basic auto body repairs. This course is for the students to receive basic industry based training before stepping up to higher level courses in this field.

Program of Study Application

Introduction to Auto Body and Estimating is a first pathway course in the Transportation, Distribution and Logistics career cluster, Automotive Body Collision and Refinishing pathway.

Adopted March 2018

Course Standards

IAB 1 Students will demonstrate understanding of auto body safety practices and careers.

Webb Level	*Sub-indicator*	*Integrated Content*
Level 2: Skill/Concept	IAB 1.1 Demonstrate auto body safety practices Examples: • Select and use proper personal safety equipment; take the necessary precautions with hazardous operations and materials in accordance with federal, state, and local regulations. HP-I • Locate procedures and precautions that may apply to the vehicle being repaired. HP-I • Identify vehicle system hazard types, locations and recommended procedures (supplemental restraint system (SRS), hybrid/electric/alternative fuel vehicles) before inspecting or replacing components. HP-I	• National Automotive Technicians Education Foundation (NATEF) Tasks that pertain to safety • OSHA 10
Level 2: Skill/Concept	IAB 1.2 Analyze career opportunities in the Transportation, Distribution, & Logistics career cluster Examples: • Create resume • Contact industry leaders • Identify related careers of auto body	• SDMylife • Industry speakers

Notes: HP-I – High Priority Individual and HP-G – High Priority Group

IAB 2 Demonstrate uses of auto body tools and equipment.

Webb Level	*Sub-indicator*	*Integrated Content*
Level 2: Skill/Concept	IAB 2.1 Demonstrate hand and power tools and their uses Examples: • Names of tools and their uses • Difference between pneumatic and electric • Safety procedures when using tools • Show how to maintain tools	
Level 3: Strategic Thinking	IAB 2.2 Analyze uses of a compressed air system Examples: • Components of a compressed air system • Compressed air system maintenance • Uses of compressed air • Safety issues when using compressed air • Operations of a compressed air system • Demonstrate use of compressed air in different operations.	• NATEF Tasks that pertain to compressed air systems

Notes

IAB 3 Employ collision repair estimating processes.

Webb Level	*Sub-indicator*	*Integrated Content*
Level 3: Strategic Thinking	IAB 3.1 Demonstrate the process involved in obtaining important information Examples: • Determine and record customer/vehicle owner information. HP-I • Identify and record vehicle identification number (VIN) information, including nation of origin, make, model, restraint system, body type, productions date, engine type and assembly plant. HP-I • Identify and record vehicle mileage and options, including trim level, paint code, transmission, accessories and modifications HP-I	• NATEF Tasks that pertain to this sub-indicator.
Level 2: Skill/Concept	IAB 3.2 Demonstrate the process of writing a repair estimate Examples: • Position the vehicle for inspection. HP-G • Prepare vehicle for inspection by providing access to damaged areas. HP-G • Analyze damage to determine appropriate methods for overall repairs. HP-I • Identify and record pre-existing damage. HP-I • Apply appropriate estimating and parts nomenclature (terminology). HP-I • Determine and apply appropriate estimating sequence. HP-I • Utilize estimating guide procedure pages. HP-I • Identify operations requiring labor value judgment. HP-G • Select appropriate labor value for each operation (structural, non-structural, mechanical, and refinish). HP-I • Apply math skills to establish charges and totals. HP-I • Identify procedural differences between computer generated and manually written estimates. HP-G • Recognize the differences in estimation procedures when using different information provider systems. HP-G	• NATEF Tasks that pertain to this sub-indicator.

Notes

IAB 4 Apply auto body repair and finishing techniques.

Webb Level	*Sub-indicator*	*Integrated Content*
Level 2: Skill/Concept	IAB 4.1 Demonstrate basic auto body repair techniques Examples: • Know proper corrosion protection methods and why you apply them. • Welding processes • Metal straightening techniques • Filler options • Plastic repair techniques • Purpose of block sanding • Hammer and Dolly procedures • Block sanding techniques • Uses of different body fillers • Proper uses of sandpaper grits	• NATEF Tasks that pertain to this sub-indicator.
Level 2: Skill/Concept	IAB 4.2 Demonstrate processes in automotive finishing Examples: • Know and understand proper overspray protection • Proper refinishing procedures • Proper surface preparation • Uses of refinishing equipment • Apply overspray protection • Prepare different surfaces properly • Demonstrate how to use refinishing equipment (including maintenance) • Perform a spray gun test	• NATEF Tasks that pertain to this sub-indicator.

Notes