



Introduction to Auto Body and Estimating

Career Cluster	Transportation, Distribution & Logistics
Course Code	20124
Prerequisite(s)	None
Credit	0.5 to 1.0
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	See: https://sdmylife.com/images/Approved-CTE-Dual-Credit.pdf
Teacher Certification	Transportation, Distribution & Logistics Cluster Endorsement; Autobody Technology Pathway Endorsement; *Autobody Technology
Resources	N/A

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 students to receive basic industry-based training before advancing 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.

Course Standards

IAB 1: Students will demonstrate understanding of auto body safety practices and careers.	
<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skills/Concepts	IAB 1.1 Demonstrate auto body safety practices. <ul style="list-style-type: none"> ● Select and use proper personal safety equipment; take the necessary precautions with hazardous operations and materials in accordance with federal, state, and local regulations ● Locate procedures and precautions that may apply to the vehicle being repaired ● Identify vehicle system hazard types, locations and recommended procedures (supplemental restraint system (SRS), hybrid/electric/alternative fuel vehicles) before inspecting or replacing components
Two Skill/Concept	IAB 1.2 Analyze career opportunities in the Transportation, Distribution, & Logistics career cluster. <ul style="list-style-type: none"> ● Create a resume ● Contact industry leaders ● Identify related careers of auto body

IAB 2: Demonstrate uses of auto body tools and equipment.	
<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skill/Concept	IAB 2.1 Demonstrate hand and power tools and their uses. <ul style="list-style-type: none"> ● Name tools and their uses ● Differentiate between pneumatic and electric ● Demonstrate appropriate safety procedures when using tools ● Show how to maintain tools
Three Strategic Thinking	IAB 2.2 Analyze uses of a compressed air system. <ul style="list-style-type: none"> ● 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

IAB 3: Employ collision repair estimating processes.	
<i>Webb Level</i>	<i>Sub-indicator</i>
Three Strategic Thinking	IAB 3.1 Demonstrate the process involved in obtaining important information. <ul style="list-style-type: none"> ● Determine and record customer/vehicle owner information ● Identify and record vehicle identification number (VIN) information, including nation of origin, make, model, restraint system, body type, production date, engine type and assembly plant ● Identify and record vehicle mileage and options, including trim level, paint code, transmission, accessories and modifications

Two Skills/Concepts	<p>IAB 3.2 Demonstrate the process of writing a repair estimate.</p> <ul style="list-style-type: none"> ● Position the vehicle for inspection ● Prepare vehicle for inspection by providing access to damaged areas ● Analyze damage to determine appropriate methods for overall repairs ● Identify and record pre-existing damage ● Apply appropriate estimating and parts nomenclature (terminology) ● Determine and apply appropriate estimating sequence ● Utilize estimating guide procedure pages ● Identify operations requiring labor value judgment ● Select appropriate labor value for each operation (structural, non-structural, mechanical, and refinish) ● Apply math skills to establish charges and totals ● Identify procedural differences between computer generated and manually written estimates ● Recognize the differences in estimation procedures when using different information provider systems
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IAB 4: Apply auto body repair and finishing techniques.	
<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skill/Concept	<p>IAB 4.1 Demonstrate basic auto body repair techniques.</p> <ul style="list-style-type: none"> ● Explain proper corrosion protection methods and why you apply them ● Demonstrate welding processes ● Apply metal straightening techniques ● Explain the uses of different body filler options ● Demonstrate plastic repair techniques ● Explain the purpose of block sanding ● Demonstrate block sanding techniques ● Demonstrate Hammer and Dolly procedures ● Demonstrate proper uses of sandpaper grits
Two Skill/Concept	<p>IAB 4.2 Demonstrate processes in automotive finishing.</p> <ul style="list-style-type: none"> ● Know and understand proper overspray protection ● Demonstrate proper refinishing procedures ● Explain proper surface preparation ● Apply overspray protection ● Prepare different surfaces properly ● Demonstrate how to use refinishing equipment (including maintenance) ● Perform a spray gun test

IAB 5: Students will understand and apply appropriate business practices.	
<i>Webb Level</i>	<i>Sub-indicator</i>
Three Strategic Thinking	IAB 5.1 Demonstrate the importance of, and the procedures for, maintaining accurate records.
Three Strategic Thinking	IAB 5.2 Understand the concept and application of ethical business practices.

Three Strategic Thinking	IAB 5.3 Understand the concept and application of excellent customer relations practices.
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