



Walker Career Center

Automotive Body Repair Capstone

DOE# 7380



Course Description and Outline

This course further explores important skills and competencies within the Automotive Body Technology Pathway. Topics such as Automotive Painting Technology, Collision Damage Appraising, and Fiberglass Plastic Repair. Additionally, Co-Op and Internship opportunities will be available for students.

Teacher Information and Student Supports

Name: Jeremy Ross
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Course Supplies

- Online Textbook
- Work Shoes
- Work Clothes

Additional Supports

- Reteach and Enrichment activities in class every week
- Individual help by appointment when necessary

Journey of a Graduate Skills

Critical Thinking

- Demonstrate proper shop safety practices while in the lab(s). This includes wearing safety glasses (goggles) at all times while in the lab(s).
- Prepare surfaces for refinishing. This includes proper mixing and application of primer as well as sanding, cleaning, masking, etc.
- .Spray Automotive Paint. This includes the knowledge of how to properly set up, use, clean and maintain a spray gun and its related equipment (i.e. air hoses, air source(s), air lines, etc.).
- Tint and Blend Colors. This includes being able to properly match paint color and type of that already on the vehicle. This also includes the ability to blend paint while applying it to the vehicle.
- Calculate paint and materials needed. This includes determining the proper type and amount of paint and related materials needed to make the repair
- Remove dents in body panels. This includes properly repairing, filling, etc. dents as well as sanding the filler to the contour of the vehicle.
- Demonstrate body-filling techniques. This includes mixing, proper application and sanding of body filler.

Communication

- Demonstrate proper shop safety practices while in the lab(s). This includes wearing safety glasses (goggles) at all times while in the lab(s).
- Describe and demonstrate how to set up and use a spray gun..

Resilience

- Spot Refinishing. This includes properly matching paint colors and types in order to apply paint to one area of the automobile so that there is no evidence of the repair
- Perform all painting necessary for I-CAR painting qualification.
- Inspect and record damage on a damaged vehicle. Diagnose and measure structural damage using various measuring devices

Collaboration

- Work in groups to remove and install parts. This includes the proper removal, installation, inspection, and replacement (if necessary) of panels and ornaments.
- Work in groups to perform repairs.
- Work in groups to perform estimates.
- Work in groups to weld..

- Work in groups to perform the replacement of body panels, both in steel and plastic parts.

Content Knowledge

- Compound (buff), polish and clean up the job. This includes buffing and polishing the vehicle after wet sanding to remove any defects and bring out paint shine. This also includes cleaning body openings (door jambs, edges, etc.) as well as the entire exterior to make the vehicle deliverable to its owner after repairs are completed.
- Use and identify hand and power tools. This includes safely and properly using the tools.
- Demonstrate proper shop safety practices while in the lab(s). This includes wearing safety glasses (goggles) at all times while in the lab(s).
- Record labor times and parts pieces from cash guides on estimate form. Calculate data on estimate form.
- Perform metal straightening and filling metals. This includes heat or cold shrinking of stretched metal panels, mixing and applying body filler (bondo) while shaping during curing as well as rough sanding cured body filler to contour and then finish sanding.
- Select proper tools and materials needed to repair damaged sheet metal. This includes knowing what each tool is for and how to properly use it

Citizenship

- Identify proper shop safety practices while in the labs.
- Evaluate employment and career pathway opportunities related to established career interest(s) in the field of transportation
- Evaluate resources that keep workers current in the career field
- Describe the emerging transportation-related jobs and industry needs
- Demonstrate skills and attitudes needed for lifelong learning
- Identify state and national safety regulations for working in a transportation facility
- Practice the proper storage of tools
- Practice appropriate shop/lab upkeep and maintenance duties
- Practice safety procedures for handling and disposal of hazardous materials
- Practice safety procedures in cases of emergency

Grade Calculation

MSD Warren Township Scale

Grade	Percentage
A	92.5 - 100
A-	89.5 - 92.4
B+	86.5 - 89.4
B	82.5 - 86.4
B-	79.5 - 82.4
C+	76.5 - 79.4
C	72.5 - 76.4
C-	69.5 - 72.4
D+	66.5 - 69.4
D	62.5 - 66.4
D-	59.5 - 62.4
F	Below 59.5

Grading Policies

Semester Grade

Your semester grade will be calculated in the following way:

50% Employability skills

40% Assignments

10% Test

Warren Central Grading Policy

The high school grading policies will be explained here

Warren Central Homework Policy

The high school homework policies will be explained here.

Synergy Grades

Grades posted in Synergy reflect the students' academic performance in the course.

Credits/Pathways

CORE 40 Diploma

Course fulfills two credits of the elective requirement for the Core 40 diploma.

Academic/Technical Honors Diploma

Has potential to fulfill academic/technical honors diploma. - see counselor

CTE Graduation Pathway

Recommended – Intro to Transportation

Principles – Principles of Collision Repair

Course A –Automotive Body Repair

Course B – Plastic Body Repair and Painting

Fundamentals

Capstone –Collision Repair Capstone

Types of Assignments and Assessments

Assignments

Assignments will include classwork, homework, labs, and bell work. These items are opportunities for students to practice the concepts learned in class.

Labs

Each unit will have one or more laboratory experiments. Labs are designed to demonstrate “real world” applications of the class concepts and help students develop a deeper understanding of the learning objectives.

Assessments

Tests/projects cover Indiana State Standards.

Quizzes may be given throughout a unit. There may or may not be a quiz for each unit.