



# Walker Career Center

## Automotive Body Repair

DOE# 7204



Course Description and Outline	Teacher Information and Student Supports
<p>Automotive Body Repair provides students with an understanding of the materials, measuring, welding, and information resources applicable to collision repair. Students will study steel and aluminum dent repair, including the welding practices commonly performed within an automotive repair environment. Students will gain basic skills and knowledge in oxy-fuel welding, cutting, brazing and plasma cutting, gas metal arc welding, squeeze type resistance welding, exterior panel welding and ICAR welding test preparation. Students will also learn the installation of moldings, ornaments, and fasteners with emphasis on sheet metal analysis and safety.</p>	<p><b>Name:</b> Jeremy Ross <b>Email:</b> <a href="mailto:jross5@warren.k12.in.us">jross5@warren.k12.in.us</a> <b>Phone:</b> 317-532-6150 ext. 6168</p> <p><b>Course Supplies</b></p> <ul style="list-style-type: none"><li>● Online Textbook</li><li>● Work Shoes</li><li>● Work Clothes</li></ul> <p><b>Additional Supports</b></p> <ul style="list-style-type: none"><li>● Reteach and Enrichment activities in class every week</li><li>● Individual help by appointment when necessary</li></ul>
<b><i>Journey of a Graduate Skills</i></b>	
<p><b>Critical Thinking</b></p> <ul style="list-style-type: none"><li>● Gauge metals. This includes the proper use of specific measuring tools used to gauge metals.</li><li>● Perform minor damage repair. This includes properly mixing and applying body filler (bondo), sanding, priming, etc. in order to prepare the surface for painting.</li><li>● Demonstrate the proper safety procedures in oxy-fuel, gas metal arc welding, plasma cutting, squeeze type resistance and exterior panel welding.</li></ul> <p><b>Communication</b></p> <ul style="list-style-type: none"><li>● Define and describe different types of metals. This includes the identification of the various types of metals used on automobiles.</li><li>● Describe and demonstrate how to set up and shut down an oxy-fuel station properly and safely.</li></ul> <p><b>Resilience</b></p> <ul style="list-style-type: none"><li>● Attain readiness to take ICAR Steel Welding Certification exam.</li><li>● Perform all welds necessary for I-CAR welder qualification.</li></ul> <p><b>Collaboration</b></p> <ul style="list-style-type: none"><li>● Work in groups to remove and install moldings and ornaments. This includes the proper removal, installation, inspection, and replacement (if necessary) of moldings and ornaments.</li><li>● Work in groups to perform soldering and brazing with oxy-fuel equipment.</li><li>● Work in groups to perform square cut, bevel cut and hole cut with hand-held oxy-fuel cutting torch and plasma cutting equipment.</li><li>● Work in groups to weld butt, lap and tee joints in the vertical and overhead positions with GMAW.</li><li>● Work in groups to perform welds with a squeeze type resistance welder.</li><li>● Work in groups to perform the replacement of body panels, both in steel and plastic parts.</li></ul>	

### Content Knowledge

- Identify fasteners and their use. This includes all the various fasteners used on the automobile to attach a variety of body panels and pieces to the body and/or frame of the vehicle.
- 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).

### 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

### 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***

## **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.

## **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.