

## COURSE SYLLABUS

<b>LAST REVIEW</b>	Fall 2022
<b>COURSE TITLE</b>	Cosmetic Auto Body
<b>COURSE NUMBER</b>	ACRT 0110
<b>DIVISION</b>	Career and Technical Education
<b>DEPARTMENT</b>	ACRT
<b>CIP CODE</b>	47.0603
<b>CREDIT HOURS</b>	2
<b>CONTACT HOURS/WEEK</b>	Class: 1      Lab: 2      Clinical: X
<b>PREREQUISITES</b>	<b>ACRT 0101 – OSHA 10</b>
<b>COREQUISITES</b>	<b>None</b>
<b>COURSE PLACEMENT</b>	<b>None</b>

### COURSE DESCRIPTION

This is a continuing education class dealing with small collisions and rust repair. Learn basic welding, safety and auto body techniques concerning dents, plastic fillers and rust repair, sanding techniques, and hands-on training.

### PROGRAM ALIGNMENT

This course is part of a program aligned through the Kansas Board of Regents and Technical Education Authority. For more information, please visit:

[https://kansasregents.org/workforce\\_development/program-alignment](https://kansasregents.org/workforce_development/program-alignment)

### PROGRAM LEARNING OUTCOMES

1. Demonstrate adherence to safety and pollution prevention standards according to OSHA and EPA regulations.
2. Demonstrate the ability to communicate effectively in workplace scenarios with an appropriate level of preparedness for daily tasks and assignments.
3. Demonstrate the ability to execute panel preparation, application of refinishing materials, and removal of paint defects.

### TEXTBOOKS

<http://kckccbookstore.com/>

### METHOD OF INSTRUCTION

A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

## **COURSE OUTLINE**

- I. Preparation
- II. Outer Body Panel Repairs, Replacements, and Adjustments
- III. Metal Finishing and Body Filling
- IV. Metal Welding and Cutting
- V. Plastics and Adhesives

## **COURSE LEARNING OUTCOMES AND COMPETENCIES**

Upon successful completion of this course, the student will:

- A. Explore the components of safety pertaining to auto collision and repair
  1. Identify safety standards for the collision repair industry
    - a. Identify safety equipment
    - b. Identify hazardous materials related to the collision repair industry
    - c. Identify and take necessary precautions with hazardous operations and materials according to federal, state, and local regulations.
    - d. Identify safety and personal health hazards according to OSHA guidelines and the Right to Know Law.
- B. Identify metal straightening techniques
  2. Determine the extent of direct and indirect damage and direction of impact; develop and document a repair plan.
  3. Remove paint from the damaged area of a body panel.
  4. Locate and reduce surface irregularities on a damaged body panel.
  5. Demonstrate hammer and dolly techniques.
  6. Determine the proper metal finishing techniques for aluminum.
  7. Determine the extent of damage to aluminum body panels; repair or replace.
- C. The student will be able to identify the application and use of body fillers
  8. Remove paint from the damaged area of a body panel.
  9. Locate and reduce surface irregularities on a damaged body panel.
  10. Demonstrate hammer and dolly techniques.
  11. Mix body filler.
  12. Apply body filler; shape during curing.
  13. Rough sand cured body filler to contour; finish sand.
- D. Demonstrate proper use, set-up and storage of welding equipment
  14. Determine the correct GMAW (MIG) welder type, electrode, wire type, diameter, and gas to be used in a specific welding situation.
  15. Set up and adjust the GMAW (MIG) welder to "tune" for proper electrode stickout, voltage, polarity, flow rate, and wire-feed speed required for the material being welded.
  16. Store, handle, and install high-pressure gas cylinders.
  17. Determine work clamp (ground) location and attach.

18. Identify different methods of attaching non-structural components (squeeze type resistant spot welds (STRSW), riveting, non-structural adhesive, silicon bronze, etc.)
- E. Identify plastics and adhesives used in automotive industry
19. Identify the types of plastics; determine repair ability.
  20. Identify the types of plastic repair procedures; clean and prepare the surface of plastic parts.

### **ASSESSMENT OF COURSE LEARNING OUTCOMES AND COMPETENCIES**

Student progress is evaluated through both formative and summative assessment methods. Specific details may be found in the instructor's course information document.

### **COLLEGE POLICIES AND PROCEDURES**

*Student Handbook*

<https://www.kckcc.edu/files/docs/student-resources/student-handbook-and-code-of-conduct.pdf>

*College Catalog*

<https://www.kckcc.edu/academics/catalog/index.html>

*College Policies and Statements*

<https://www.kckcc.edu/about/policies-statements/index.html>

*Accessibility and Accommodations*

<https://www.kckcc.edu/academics/resources/student-accessibility-support-services/index.html>.