

**SOUTHEAST COMMUNITY COLLEGE
TRANSPORTATION OCCUPATIONS
AUTO COLLISION REPAIR TECHNOLOGY
COURSE SYLLABUS
January 8, 2024**

I. CATALOG DESCRIPTION

Course Number: AUTB1254
Course Title: Collision Repair & Refinish Theory II
Prerequisite(s): AUTB 1151, AUTB 1152, AUTB 1153

Catalog Description: Application of replacing parts, use of materials, and operating hydraulic external pull equipment. Identification and repair procedures for composites and plastics using the latest repair procedures currently used in the collision repair industry.

Credit Hour: 6.0
Classroom Hours: 75
Lab Hours: 45
Total Contact Hours: 120

II. COURSE OBJECTIVES: *Course will:*

- A. List the parts of the vehicle that are considered structural and non-structural and steps necessary for replacing a part along factory seams.
- B. Describe how spot welds are separated.
- C. Explain how new body panels can be positioned on a vehicle body and weld those panels in place.
- D. Identify and explain the difference between the two types of composites used in automotive production and identify repair procedures.
- E. Locate and correct wind and water leaks.
- F. Install body accessories such as seats, molding, interior trim, and spoiler kits.
- G. Name the types of safety systems used in automotive construction.
- H. Explain the conditions and events that lead to corrosion on the automobile.
- I. Describe the anti-corrosive materials used to prevent and retard rust formation. Choose the correct anti-corrosive application equipment for specific applications.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES

A. STUDENT LEARNING OUTCOMES: *The student will be able to:*

- 1. List the parts of the vehicle that are considered structural and non-structural.
- 2. List the steps necessary for replacing a part along factory seams.
- 3. Describe repair and replacement procedures.
- 4. Identify and explain the composites used in automotive construction and proper repair procedures.
- 5. Describe how to replace and adjust vehicle body components.
- 6. Locate and correct wind and water leaks.
- 7. Explain the conditions and events that lead to corrosion and common factors involved in rust information.
- 8. Select and apply the anti-corrosive materials used to prevent and retard rust formation.
- 9. Student will understand and be able to explain the equipment required to complete the repair procedures.

B. GENERAL EDUCATION LEARNING OUTCOMES:

GELO #3: Critical Thinking & Problem Solving

Outcomes:

1. Collect, identify, interpret and analyze data.
2. Synthesize information to arrive at reasoned solutions to problems.
3. Evaluate ideas presented in writing, medial, speech, or artistic presentations.
4. Evaluate the validity of arguments, alternatives, data, outcomes, and/or impacts of actions.
5. Acquire and integrate knowledge and construct relationships across disciplines.

IV. CONTENT/TOPICAL OUTLINE

- A. Course introduction
- B. Automotive collision
- C. Automotive plastics
- D. Misc. repairs and replacements
- E. Corrosion and corrosion protections
- F. Equipment (Usage, Types, and Safety Precautions)
- G. Shop safety

V. INSTRUCTIONAL MATERIALS

Required Text(s):

Auto Body Repair Technology 6th Edition Text. Copyright 2015 ISBN-13: 978-1133702856, ISBN-10: 1133702856

Other Resources:

Computer/Multimedia Projector
Videos/DVD

I-Car textbooks and handouts provided by the instructor

Student Required Material:

Notebook Pen or Pencil

Outside Reading/Research Required:

Chapters will be assigned according to the class schedule.
Research on state-of-the-art equipment or procedures as assigned by the instructor.

VI. METHODS OF PRESENTATION / INSTRUCTION

A. Methods of presentation typically include a combination of the following:

1. Lecture
2. Small and large group discussion
3. Video presentation
4. Transparencies
5. Demonstrations
6. Project boards
7. Flip charts
8. Handouts
9. Observations
10. Assigned lab projects
11. Field trips

VII. METHODS OF EVALUATION

A. Methods of evaluation typically include a combination of the following:

1. Notebook (if required)
2. Quizzes
3. Tests
4. Lab grades
5. Attendance/class conduct

Letter grades will be based on the SCC Standard Grade Scale Policy. **Note:** See course information document for specific details on how the course grades will be calculated.

VIII. SPECIFIC COURSE REQUIREMENTS

A. Student must:

1. Complete all tests, projects, assignments, and notebook (if required).
2. Earn a final grade of 60% or higher.

B. Attendance:

1. Student must follow the Attendance Policy as stated in the college student handbook and the Auto Collision Repair Technology Attendance Policy.

C. Program shop safety rules will be followed.

D. Please see the course information document for any additional safety rules established by the instructor.