



El Camino College
COURSE OUTLINE OF RECORD – Official

Course Acronym:	ACRP
Course Number:	6
Descriptive Title:	Automotive Collision Repair for Non-Majors
Division:	Industry and Technology
Department:	Automotive Collision Repair/Painting
Course Disciplines:	Automotive Collision Repair
Catalog Description:	This course is designed to provide students with a brief, hands-on introduction to all facets of automotive collision repair. Topics include safety practices, customer rights and the collision repair process, auto parts nomenclature, dent removal, plastic repair, filler application and shaping, priming, painting and detailing.
Prerequisite:	
Co-requisite:	
Recommended Preparation:	
Enrollment Limitation:	
Hours Lecture (per week):	1
Hours Laboratory (per week):	3
Outside Study Hours:	2
Total Course Hours:	72
Course Units:	2
Grading Method:	Letter Grade only
Credit Status:	Credit, degree applicable
Transfer CSU:	Yes
Effective Date:	11/17/1997
Transfer UC:	No
Effective Date:	
General Education: ECC	
Term:	
Other:	
CSU GE:	
Term:	
Other:	
IGETC:	
Term:	
Other:	
Student Learning Outcomes:	SLO #1 Correct Nomenclature Students will be able to locate and identify using correct nomenclature the major body panels and body style of a car, truck and SUV.

	SLO #2 Repair Plan Students will be able to examine a minimally damaged (dented and/or scratched) sheet metal panel and formulate a repair plan that includes choosing the correct tools and procedures to repair the panel. SLO #3 HVLP Spray Gun Usage Students will be able to use (and clean) an HVLP spray gun to spray primer, basecoat and clearcoat using a 50% overlap spray pattern.
Course Objectives:	1. Complete a comprehensive safety test with 100% accuracy. 2. Identify major vehicle panels and body styles using correct nomenclature. 3. Choose and utilize materials and processes for sheet metal dent repair operations. 4. Choose and utilize materials and processes for plastic repair. 5. Set up and operate a High Volume, Low Pressure (HVLP) spray gun. 6. Describe the collision repair process and identify warning signs of poor or fraudulent repairs.
Major Topics:	I. ORIENTATION (2 hours, lecture) A. Shop tour, safety practices, personal safety equipment B. Vehicle construction and body styles C. Vehicle parts nomenclature II. METAL WORKING & DENT REPAIR (4 hours, lecture) A. Theory B. Hand and power tools C. Surface preparation D. Abrasives E. Fillers III. METAL WORKING & DENT REPAIR (15 hours, lab) A. Theory, reading damage B. Hand and power tools C. Surface preparation D. Abrasives E. Fillers IV. PLASTIC REPAIR (2 hours, lecture) A. Identification of plastic materials B. Repair adhesives C. Single-sided repairs and surface prep D. Plastic welding E. Double-sided repairs and surface prep F. Headlight reconditioning V. PLASTIC REPAIR (9 hours, lab) A. Identification of plastic materials B. Repair adhesives C. Single-sided repairs and surface prep D. Plastic welding E. Double-sided repairs and surface prep F. Headlight reconditioning VI. HVLP SPRAY EQUIPMENT, PRIMING (3 hours, lecture) A. Safety precautions B. Rule 1151

- C. Spray gun set up, operation and cleaning
- D. Primer types and mixing
- E. Application of primer
- F. Preparation of primed surfaces for painting

VII. HVLP SPRAY EQUIPMENT, PRIMING (9 hours, lab)

- A. Safety precautions
- B. Rule 1151
- C. Spray gun set up, operation and cleaning
- D. Primer types and mixing
- E. Application of primer
- F. Preparation of primed surfaces for painting

VIII. TOPCOAT PAINTING (4 hours, lecture)

- A. Paint and material identification, mixing and application
- B. Locating vehicle color codes
- C. Spray booth operation
- D. Spray gun adjustment
- E. Clean up and proper disposal of paint waste
- F. Paint touch-ups for rock chips and scratches

IX. TOPCOAT PAINTING (12 hours, lab)

- A. Paint and material identification, mixing and application
- B. Locating vehicle color codes
- C. Spray booth operation
- D. Spray gun adjustment
- E. Clean up and proper disposal of paint waste
- F. Paint touch-ups for rock chips and scratches

X. AUTO DETAILING (1 hour, lecture)

- A. Identification of paint defects, causes and cures
- B. Color sanding and buffing
- C. Using a clay bar
- D. Car care products for maintenance and aesthetic repairs

XI. AUTO DETAILING (6 hours, lab)

- A. Identification of paint defects, causes and cures
- B. Color sanding and buffing
- C. Using a clay bar
- D. Car care products for maintenance and aesthetic repairs

XII. COLLISION REPAIR FOR VEHICLE OWNERS (2 hours, lecture)

- A. Customer rights
- B. Careers in collision repair/the people you'll meet in the repair shop
- C. Reading an estimate
- D. What your auto insurance covers (and doesn't cover)
- E. Identifying poor repairs
- F. Repair fraud
- G. Purchasing a used car

XIII. COLLISION REPAIR FOR VEHICLE OWNERS (3 hours, lab)

- A. Customer rights
- B. Careers in collision repair/the people you'll meet in the repair shop
- C. Reading an estimate
- D. What your auto insurance covers (and doesn't cover)
- E. Identifying poor repairs
- F. Repair fraud

	G. Purchasing a used car
Total Lecture Hours:	18
Total Laboratory Hours:	54
Total Hours:	72
Primary Method of Evaluation:	3) Skills demonstration
Typical Assignment Using Primary Method of Evaluation:	Given a dented metal fender, select the tools and techniques needed to remove the dent and return the fender to its original contour. Consult instructor for evaluation.
Critical Thinking Assignment 1:	Given a weathered or minimally damaged automotive panel, identify the cause of the damage and the repair procedure needed to correct the damage. Choose the least aggressive method that solves the problem efficiently. Justify your recommendation in a short-written statement and submit to the instructor.
Critical Thinking Assignment 2:	Analyze a non-structurally damaged vehicle and the written estimate created for it. In teams of three, discuss and determine if the estimate is written fairly, completely and correctly. Present your conclusions to the class and the instructor.
Other Evaluation Methods:	Class Performance, Completion, Laboratory Reports, Matching Items, Multiple Choice, Objective Exam, Performance Exams, Quizzes, True/False
Instructional Methods:	Demonstration, Group Activities, Lab, Lecture
If other:	
Work Outside of Class:	Answer questions, Observation of or participation in an activity related to course content (such as theatre event, museum, concert, debate, meeting), Problem solving activity, Study
If Other:	
Up-To-Date Representative Textbooks:	Alfred Thomas. <u>Automotive Collision Repair & Refinishing: A Foundation Course for Technicians</u> . 3 rd Edition. Delmar Cengage, 2018. (Discipline Standard)
Alternative Textbooks:	
Required Supplementary Readings:	
Other Required Materials:	Paint respirator Safety glasses Nitrile gloves
Requisite:	
Category:	
Requisite course(s): List both prerequisites and corequisites in this box.	
Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s).	
Requisite Skill:	
Requisite Skill and Matching Skill(s): Bold the requisite skill(s). If applicable	

Requisite course:	
Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s).	
Requisite Skill:	
Requisite Skill and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s). If applicable	
Enrollment Limitations and Category:	
Enrollment Limitations Impact:	
Course Created by:	Ronald Dohi
Date:	09/01/1997
Original Board Approval Date:	11/17/1997
Last Reviewed and/or Revised by:	Patricia Fairchild
Date:	12/01/2024
Last Board Approval Date:	01/21/2026 eff FA 2026