

**Mission Valley Regional Occupation Program
AUTO BODY PAINT AND REFINISHING 2
COURSE OUTLINE**

COURSE TITLE:

Auto Body Paint and Refinishing 2

CBEDS NUMBER:

5654

JOB TITLES/DOT CODES:

Automobile-Body Repair	807.381-010
Auto Body Repair	845.381-014

COURSE DESCRIPTION:

Students will be provided the opportunity to develop the skills required to be successful in the auto-body repair, painting and refinishing industry. They will develop the ability to identify and perform with materials, tools, and equipment at a high level of efficiency and safety; and to work harmoniously with others. Students will develop skills in welding, light auto-body repair work, prepping, painting, and finishing, so that they can enter the workforce and become productive and constructive citizens.

HOURS:

Class	360
CC	0
CVE	0
TOTAL	360

Abbreviations:

CC = Community Classroom (unpaid, on-the-job, training experience at business sites)

CVE = Cooperative Vocational Education (paid, on-the-job, training experience at business site)

PREREQUISITES:

Passing Grade of C or above in Auto Body Paint & Refinishing 1.

DATE OF REVISION:

November 9, 2017

DATE RE-APPROVED:

November 8, 2018

COURSE OUTLINE:

HOURS:

I. Career Preparation Standards

(Necessary skills for any occupation – MVROP ESLR #1)

WORKPLACE BASIC SKILLS AND BEHAVIORS

(Hours integrated throughout)

- a. Apply skills learned in class
- b. Analyze information and make decisions
- c. Communicate verbally and in writing
- d. Work independently and as a team member in a diverse workplace
- e. Work reliably, responsibly, and ethically

II. Career Technical Skills

(Occupational competencies – MVROP ESLR #2)

a. Estimating Jobs

(10 hours)

- i. Perform assessment of damages
- ii. Estimate straightening time
- iii. Estimate paint time
- iv. Determine cost of materials
- v. Demonstrate and understand how to look up parts in a manual
- vi. Pass test

b. Business Functions

(20 hours)

- i. Demonstrate an awareness of how a business operates
- ii. Recognize the functions of industry: management, operations, personnel, finance, distribution, and services

c. Straightening & Alignment of Sheet Metal

(120 hours)

- i. Perform roughing-out metal
- ii. Perform aligning sheet metal
- iii. Understand stress and strain
- iv. Perform hammering-out dents
- v. Perform stud gun use
- vi. Understand shrinking metal
- vii. Perform grinding sheet metal
- viii. Perform filing sheet metal
- ix. Understand R & R and R & I of body panels
- x. Pass safety test

d. Sheet-Molded Compounds & Other Plastics

(35 hours)

- i. Describe sheet-molded compounds
- ii. Describe usage on automobiles
- iii. Demonstrate use of ABS & other plastics
- iv. Explain identification of type

- v. Perform repair of SMC & other plastics
- vi. Perform prep for paint
- vii. Pass safety test

e. Welding *(45 hours)*

- i. Perform welding safety practices including precautions for electronic components
- ii. Demonstrate MIG use, spot, and stitch
- iii. Pass safety test

f. Refinishing *(130 hours)*

- i. Explain H.V.L.P. spray equipment
- ii. Demonstrate preparation for paint
- iii. Understand identification of different types of paint
- iv. Understand V.O.C. review
- v. Understand mixing procedures for paint
- vi. Demonstrate matching colors
- vii. Demonstrate spot painting procedures
- viii. Demonstrate a complete paint job
- ix. Demonstrate two-stage painting
- x. Demonstrate color sanding & polishing
- xi. Pass safety test

III. Career Path Strategies

(Strategic planning for a career – MVROP ESLR #3)

JOB EMPLOYMENT SKILLS

(Hours Integrated throughout)

- a. Develop a plan to achieve career goals
- b. Use effective job search strategies
- c. Demonstrate an awareness of the importance of lifelong learning

TOTAL COURSE APPROVED HOURS = 360

ADDITIONAL ITEMS:

- a. **Articulation:** This course is not articulated with a college.
- b. **UC/CSU A-G Eligibility:** This course does not meet the UC/CSU A-G requirements.
- c. **Instructional Strategies:**
 - Lecture
 - Group Discussion
 - Projects
 - Hands-on Practice
 - Demonstration

- Team Learning
- Simulation

d. **Instructional Materials:**

- *Introduction to Auto Body*
- *Auto Body Repair*
- *Auto Body Refinishing*

e. **Completion Certificate Competencies**

**Students will only earn a certificate if they pass the class with an 80% or higher.*

Career Preparation Standards:

- Demonstrate Workplace Basic Skills & Behaviors
- Select and Use Appropriate Repair Tools
- Use Effective Employability Strategies
- Practice Shop Safety
- Show Care for Shop Equipment
- Recognize Business Functions

Career Technical Skills:

- Perform Straightening & Alignment of Sheet Metal
- Demonstrate Preparing the Surface for Filler
- Demonstrate Auto Body Refinishing Process
- Demonstrate Two-Stage Painting
- Determine Job Estimate
- Perform Electric Welding Process
- Demonstrate Use of Sheet Molded Compounds & Other Plastics
- Demonstrate Mixing & Application of Body Filler
- Demonstrate Sanding & Buffing Procedure
- Perform Detailing Job