

**Mission Valley Regional Occupational Program
AUTO BODY AND REFINISHING**

1. Course Title:

Auto Body Paint and Refinishing 1, 2

2. CBEDS Title:

Automotive Body Paint & Refinishing 1 & 2

3. CBEDS Number:

5654

4. Job Titles/DOT Codes:

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

5. 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 work force and become productive and constructive citizens.

6. Hours:

Class	720
CC	370
CVE	720
Total Hours	1440

7. Prerequisites:

Grade 11+

8. Date of Revision:

December 12, 2011

Date Re-Approved:

November 10, 2016

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 sites)

9. Course Outline:

I.	Career Preparation Standards Necessary skills for any occupation (MVROP ESLR #1)	Class	CC	CVE
A.	WORKPLACE BASIC SKILLS AND BEHAVIORS 1. Apply skills learned in class 2. Analyze information and make decisions 3. Communicate verbally and in writing 4. Work independently and as a team member in a diverse workplace 5. Work reliably, responsibly, and ethically	Integrated throughout course		
II.	CAREER TECHNICAL SKILLS Occupational competencies (MVROP ESLR #2)			
A.	Introduction to shop and safety 1. Practice safety and follow shop rules 2. Dress appropriately 3. Use terminology used in auto trade 4. Follow V.O.C. rules and procedures 5. Select appropriate tools 6. Pass safety test	60	30	60
B.	Body shop tools 1. Understand basic hand tools 2. Demonstrate air and specialty tools description and use 3. Perform care of tools 4. Pass safety test	10	5	10
C.	Care for compressor 1. Demonstrate how to turn on compressor 2. Understand the purpose of the removal of water & oil 3. Explain the shut-down procedure 4. Explain over-heating procedure 5. Pass safety test	2.5	1	2.5
D.	Operation of spray booth 1. Demonstrate how to turn on spray booth 2. Explain the use of the heat lamp 3. Demonstrate changing of filters-intake/exhaust 4. Demonstrate wetting-down floor (not filters) 5. Explain how to blow-off vehicle/yourself before entering booth 6. Pass safety test	2.5	1	2.5
E.	Estimating jobs 1. Perform assessment of damages	10	5	10

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		Class	CC	CVE
	2. Estimate straightening time			
	3. Estimate paint time			
	4. Determine cost of materials			
	5. Demonstrate and understand how to look up parts in a manual			
	6. Pass test			
F.	Business Functions	20	10	20
	1. Demonstrate an awareness of how a business operates.			
	2. Recognize the functions of industry: management, operations, personnel, finance, distribution, and services.			
G.	Straightening & alignment of sheet metal	210	105	210
	1. Perform roughing-out metal			
	2. Perform aligning sheet metal			
	3. Understand stress and strain			
	4. Perform hammering-out dents			
	5. Perform stud gun use			
	6. Understand shrinking metal			
	7. Perform grinding sheet metal			
	8. Perform filing sheet metal			
	9. Understand R & R and R & I of body panels			
	10. Pass safety test			
H.	Sheet-molded compounds & other plastics	35	17	35
	1. Describe sheet-molded compounds			
	2. Describe usage on automobiles			
	3. Demonstrate use of ABS & other plastics			
	4. Explain identification of type			
	5. Perform repair of SMC & other plastics			
	6. Perform prep for paint			
	7. Pass safety test			
I.	Filing with body filler	105	53	105
	1. Explain areas of use			
	2. Demonstrate preparing the surface for filler			
	3. Demonstrate mixing properly			
	4. Demonstrate application			
	5. Demonstrate sanding & shaping			
	6. Demonstrate block sanding			
	7. Explain prep for primer			
	8. Pass safety test			
J.	Welding	45	23	45
	1. Perform welding safety practices including precautions for electronic components			
	2. Demonstrate MIG use, spot, and stitch			
	3. Pass safety test			

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		Class	CC	CVE
K.	Refinishing	220	110	220
	1. Explain H.V.L.P. spray equipment			
	2. Demonstrate preparation for paint			
	3. Understand identification of different types of paint			
	4. Understand V.O.C. review			
	5. Understand mixing procedures for paint			
	6. Demonstrate matching colors			
	7. Demonstrate spot painting procedures			
	8. Demonstrate a complete paint job			
	9. Demonstrate two-stage painting			
	10. Demonstrate color sanding & polishing			
	11. Pass safety test			

III.

Career Path Strategies

Strategic planning for a career (MVROP ESLR #3)

A.	JOB EMPLOYMENT SKILLS	Integrated throughout course
	1. Develop a plan to achieve career goals	
	2. Use effective job search strategies	
	3. Demonstrate an awareness of the importance of lifelong learning	

Hours 720 360 720

Total Course Approved Hours 1440

10. Additional Items:

a. Articulation: This course is not articulated with a college.

b. UC/CSU A-G Status? This course does not meet the UC/CSU A-G requirements.

c. Instructional Strategies:

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| <ul style="list-style-type: none"> • Lecture • Group discussion • Projects • Hands-On Practice | <ul style="list-style-type: none"> • Demonstration • Team Learning • Simulation |
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d. Instructional Materials:

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

e. Completion Certificate Competencies:

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