

BUTTE COLLEGE

COURSE OUTLINE

I. CATALOG DESCRIPTION

AUT 115 - Automotive Painting

3 Unit(s)

Prerequisite(s): NONE

Recommended Prep: Reading Level III; English Level II; Math Level II

Transfer Status: NT

25.5 hours Lecture

76.5 hours Lab

In this course students learn the materials, tools and procedures used in the refinishing of automobiles. Topics include, surface preparations, subcoats, primers and sealers, topcoats, and spot painting. Shop safety is emphasized.

II. OBJECTIVES

Upon successful completion of this course, the student will be able to:

- A. Identify and describe the primers, paints and sealers used in automotive refinishing, including their types, function, and properties.
- B. Properly prepare a vehicle for refinishing.
- C. Apply primers, paints and sealers to refinish a vehicle.
- D. Identify and describe the environmental issues associated with automotive refinishing.

III. COURSE CONTENT

A. Unit Titles/Suggested Time Schedule

Lecture

<u>Topics</u>	<u>Hours</u>
1. Orientation, Safety	1.00
2. Tools and Shop Layout	1.00
3. Surface Preparation	2.25
4. Subcoats, Primers, and Sealers	2.25
5. Solvent Problems	0.75
6. Topcoat (Lacquers, Acrylics, and Urethanes)	5.75
7. Spot Painting	4.75
8. Complete Refinishing	6.75
9. Environmental Issues	1.00
Total Hours	25.50

Lab

<u>Topics</u>	<u>Hours</u>
1. Orientation, Safety	1.50
2. Tools and Shop Layout	4.00
3. Surface Preparation	6.75
4. Subcoats, Primers, and Sealers	6.75
5. Solvent Problems	2.25
6. Topcoat (Lacquers, Acrylics, and Urethanes)	17.25
7. Spot Painting	14.25

8. Complete Refinishing	20.25
9. Buffing Finish Coat	2.25
10. Environmental Issues	1.25
Total Hours	76.50

IV. METHODS OF INSTRUCTION

- A. Lecture
- B. Instructor Demonstrations
- C. Collaborative Group Work
- D. Class Activities
- E. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture

V. METHODS OF EVALUATION

- A. Lab Projects
- B. Practical Evaluations

VI. EXAMPLES OF ASSIGNMENTS

- A. Reading Assignments
 - 1. Read the chapter on preparing bare metal in your text. Be prepared to discuss the procedure in class.
 - 2. Read EPA 6H standard. Be prepared to discuss the regulations in class.
- B. Writing Assignments
 - 1. Write one paragraph describing how to select the proper fluid tip size for the type of paint or primer being applied. Be prepared to explain what happens if you select the wrong tip size.
 - 2. Write two paragraphs describing the difference between sandable and non-sandable primers. Be prepared to name one sandable primer and one non-sandable primer.
- C. Out-of-Class Assignments
 - 1. Visit a local auto body collision repair facility. View a vehicle that has been freshly painted and is ready for delivery. Note the quality of the paint application and be prepared to share with the class.
 - 2. Visit a local auto body paint supply store and examine a siphon feed gun and a gravity feed spray gun. Be prepared to share your fact finding with the class.

VII. RECOMMENDED MATERIALS OF INSTRUCTION

Textbooks:

- A. Toboldt, William and Richardson, Terry. Auto Body Repairing and Refinishing. 8th Edition. Goodheart-Wilcox, 2000.
- B. Duffy, James. Auto Body Repair Technology. 6th Edition. Cengage Learning, 2015.

Materials Other Than Textbooks:

- A. Safety glasses