BUTTE COLLEGE
COURSE OUTLINE

I. **CATALOG DESCRIPTION**

AUT 114 - Auto Body Repair **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 tools and procedures used in the repair of minor automotive collision damage. Topics include welding and hydraulic tools, jointing and shrinking techniques, aligning systems, and fillers. Proper tool usage, care and safety are emphasized.

II. **OBJECTIVES**

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

A. Use appropriate terminology for a body shop.
B. Safely use and properly maintain shop tools and supplies.
C. Identify and describe basic car body designs and construction principles.
D. Demonstrate basic body repair procedures, including recognition of damaged area, realignment of damaged area, the use of fillers, and the selection and use of proper tools.
E. Demonstrate the basic procedures of surface preparation for painting.

III. **COURSE CONTENT**

A. **Unit Titles/Suggested Time Schedule**

Lecture

Topics	Hours
1. Orientation and safety shop layout	2.50
2. Car body design	0.75
3. Materials and usage, safety, care of manual and air-operated tools	4.00
4. Welding and safety	3.25
5. Jointing and shrinking techniques	2.50
6. Hydraulic tool operation, care and safety	1.50
7. Analysis and aligning systems	1.50
8. Fillers	2.50
9. Bumping and dinging procedures	3.75
10. Surface preparation for primer	3.25
Total Hours	25.50

Lab

Topics	Hours
1. Orientation and safety shop layout	8.00
2. Car body design	2.50
3. Materials and usage, safety, care of manual and air-operated tools	12.00
4. Welding and safety	10.00
5. Jointing and shrinking techniques	7.50

6.	Hydraulic tool operation, care and safety	5.00
7.	Analysis and aligning systems	5.00
8.	Fillers	8.00
9.	Bumping and dinging procedures	7.50
10.	Surface preparation for primer	11.00
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. Class participation
B. Lab Projects
C. Practical Evaluations

VI. EXAMPLES OF ASSIGNMENTS

A. Reading Assignments
   1. Read the chapter on major body sections in your text. Be prepared to discuss the readings in class.
   2. Read an article about aluminum body panel repair at autobodynews.com. Be prepared to share your article with the class.
B. Writing Assignments
   1. Write a paragraph describing how to properly apply plastic body filler. Be prepared to share your paragraph with the class.
   2. Write two paragraphs describing the differences between "hammer on" and "hammer off" hammer and dolly techniques and under what conditions each method would be used.
C. Out-of-Class Assignments
   1. Visit a local auto body paint supply store. Locate two products: one that is used to repair plastic bumpers, and one that is specifically formulated to apply over bare metal. Be prepared to discuss the products in class.
   2. Visit a local auto body collision repair facility. Ask the office staff to see how an estimate is written for collision repair. Bring a sample of an estimate to 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

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