

## **COURSE OUTLINE**

### **Painting and Refinishing: Preparation and Safety Precautions**

#### **Course Description:**

AB126. Painting and Refinishing: Preparation and Safety Precautions. 2 hours credit Prerequisite: AB 101 with a C or better. This course will enable the student to apply techniques and methods of preparing the Auto Body surface for painting. The emphasis will be placed on different methods of preparing a surface for painting to include chemical, mechanical and physical means. Safety precautions will be emphasized throughout the training.

#### **Course Relevance:**

The principles learned in this course will allow the student to perform the essential tasks of analyzing, preparing, and then performing damage repair and adjustments. These tasks are essential to those aspiring to work in the auto body repair profession.

#### **Required Materials:**

Duffey, J., (2001). *I-CAR, Professional Automotive Collision Repair (2<sup>nd</sup> ed)*. Albany, NY: Delmar Publishing

#### **Learning Outcomes:**

The intention is for the student to be able to:

1. Apply personal and environmental safety practices
2. Inspect and identify substrate, type of finish and surface condition; develop a plan for refinishing using a total products system.
3. Select a method using wet or dry sanding for refinishing.

#### **Learning PACT**

**Through the student involvement in this course, the student will develop and document his/her achievement of the following PACT skills:**

Primary skills (developed and documented):

1. Critical Thinking
  - Through the visual inspection the student will be able to determine the method of sanding
2. Problem Solving
  - Through the vehicle inspection the student will be to properly select the correct products to refinish the vehicle
3. Field-Related Training
  - Through "In lab" exercises, the student will be able to demonstrate their understanding of proper use refinishing materials.

Secondary skills (developed but not documented):  
Health Management  
Reading

**Assessment Tasks:**

These learning outcomes and primary Learning PACT skills will be demonstrated by:

1. “Hands on” projects, performing auto collision repair
2. Projects that demonstrate the ability to recognize and utilize the correct techniques and equipment to perform collision repair
3. Projects that demonstrate the ability to identify problems and correct them using accepted collision repair principles

**Course Content:**

- I. Themes - Key recurring concepts that run throughout this course:  
Safety, quality.
- II. Issues - Key issues that will be addressed in this course: areas of conflict that must be understood in order to achieve the intended outcome:
  - A. Planning an auto repair
  - B. Proper usage of chemicals and equipment
- III. Concepts – Key concepts that must be understood to address the issues:
  - A. Proper planning techniques of repair
  - B. Proper preparation of material and equipment
  - C. Proper performance of repair functions
- IV. Skills / Competencies - Actions that are essential to achieve the course outcomes:
  - A. Identify safe use and maintenance of general hand tools
  - B. Demonstrate safe use and maintenance of auto body hand tools
  - C. Identify the proper use of fire protection equipment
  - D. Use chemicals safely
  - E. Identify environmental effects of chemicals
  - F. Identify proper chemical disposal techniques
  - G. Identify information on and importance of MSD sheets

**Learning Units:**

- I. Body/paint shop work and safety procedures
- II. Preparation and priming of vehicle
- III. Body shop hand tools
- IV. Body Shop power tools/spray tools
- V. Automotive refinishing materials
- VI. Minor auto body repairs

**Learning Activities:**

Learning activities will be geared towards lecture, demonstration, and performance. Classroom lecture is designed to enable the students to understand the key principles in auto body repair.

**Grade Determination:**

The student will be graded on satisfactory completion of assessment tasks (learning activities), attendance, and written examination.