

**J. Sargeant Reynolds Community College
Course Content Summary**

Course Prefix and Number: AUB 111

Credits: 8

Course Title: Automobile Body Theory and Shop Practices

Course Description (including lecture hours, lab hours, total contacts)

Teaches and applies the fundamentals and use of body tools and materials. Emphasizes shop safety, metal working, welding, cooling systems. Teaches bodies and frames design and construction, wheel suspensions, steering systems, wheel alignment and balancing, shock absorbers, glass, hardware and upholstery. Part I of II. Lecture 5 hours. Laboratory 9 hours. Total 14 hours per week.

Course Prerequisites/Corequisites (*Entry-level competencies **required** for enrollment*)

None

Course Objectives (Each item should complete the following sentence.)

Upon completing the course, the student will be able to:

- A. Repair light body damage
- B. Remove and install exterior body parts
- C. Remove and replace weld-on structural parts
- D. Demonstrate an understanding of the industry specific terminology used throughout the collision world
- E. Demonstrate a working knowledge of when to repair or replace a part or parts

Major Topics to be Included

- 1. Introduction to Body/Paint Shop Work and Safety Procedures
 - a. Typical Body and Paint Shop Operations
 - b. Shop Safety Practices
 - c. Personal Safety and Health Protection
 - d. General Shop Procedures
- 2. Understanding Automobile Construction
 - a. Body Shapes
 - b. Construction Types
 - c. Conventional Body-Over-Frame Construction
 - d. Unitized Frame and Body Construction
- 3. Introduction to Damage Report Writing:
 - a. Design Changes
 - b. New Equipment/Skills
 - c. Insurance Company Procedures
 - d. The Customer
 - e. Tools and Equipment

4. Modern Vehicle Construction:
 - a. Vehicle Design: Past and Present
 - b. Body over Frame
 - c. Unitized Construction
 - d. Automotive Metals
 - e. Automotive Adhesives
 - f. Automotive Plastics

Effective Date of Course Content Summary (Month, Date Year): 6-1-08