

# ABDR - AUTO COLLISION REPAIR

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## **ABDR 1215 Vehicle Trim and Hardware 2 Credit Hours (1 Lec, 3 Lab)**

An in-depth study of vehicle and trim hardware.

Course Type: Technical/Vocational Course

## **ABDR 1303 Vehicle Design and Structural Analysis 3 Credit Hours (2 Lec, 2 Lab)**

An introduction to the collision repair industry with emphasis on safety, professionalism, and vehicle structural design.

Course Type: Technical/Vocational Course

## **ABDR 1307 Collision Repair Welding 3 Credit Hours (2 Lec, 4 Lab)**

A study of collision repair welding and cutting procedures

Course Type: Technical/Vocational Course

## **ABDR 1323 Collision Repair Steering and Suspension 3 Credit Hours (2 Lec, 4 Lab)**

Study of vehicle steering and suspension components including alignment, tire rotation, and balancing.

Course Type: Technical/Vocational Course

## **ABDR 1349 Automotive Plastic and Sheet Molded Compound Repair 3 Credit Hours (2 Lec, 4 Lab)**

A comprehensive course in repair of interior and exterior plastics including the use of various types of adhesives,

Course Type: Technical/Vocational Course

## **ABDR 1419 Basic Metal Repair 4 Credit Hours (2 Lec, 6 Lab)**

Covers metal principles and working techniques including proper tool usage and product application.

Course Type: Technical/Vocational Course

## **ABDR 1427 Suspension Systems 4 Credit Hours (2 Lec, 6 Lab)**

A basic study of steering components and suspension systems, related tools and equipment, individual system components. This course also includes emphasis on diagnostic services on chassis, front suspension, and manual power steering systems.

Course Type: Technical/Vocational Course

## **ABDR 1431 Basic Refinishing 4 Credit Hours (2 Lec, 6 Lab)**

An introduction to current refinishing products, shop safety, and equipment used in the automotive refinishing industry. Emphasis on surface preparation, masking techniques, and refinishing of replacement parts.

Course Type: Technical/Vocational Course

## **ABDR 1441 Structural Analysis and Damage Repair I 4 Credit Hours (2 Lec, 6 Lab)**

Training in the roughing and shaping procedures on automotive sheet metal necessary to perform body repairs. Emphasis on the alignment of component parts such as doors, hood, front-end assemblies, and deck lids.

Course Type: Technical/Vocational Course

## **ABDR 1442 Structural Analysis and Damage Repair II 4 Credit Hours (2 Lec, 6 Lab)**

Continuation of general repair and replacement procedures for damaged structural parts and collision damaged.

Course Type: Technical/Vocational Course

## **ABDR 1449 Automotive Plastic and Sheet Molded Compound Repair 4 Credit Hours (2 Lec, 6 Lab)**

A comprehensive course in repair of interior and exterior plastics including the use of various types of adhesives and plastic welding.

Course Type: Technical/Vocational Course

## **ABDR 1458 Intermediate Refinishing 4 Credit Hours (2 Lec, 6 Lab)**

Training in mixing and spraying of automotive topcoats. Emphasis on formula ingredient, reducing, thinning, and special spraying techniques. Introduction to partial panel refinishing techniques and current industry paint removal techniques.

Course Type: Technical/Vocational Course

## **ABDR 1541 Structural Analysis and Damage Repair I 5 Credit Hours (3 Lec, 6 Lab)**

Skill development in the roughing and shaping procedures on automotive sheet metal necessary to make satisfactory minor body repairs.

Emphasis on the alignment of component parts such as doors, hood, front-end assemblies, and deck lids.

Course Type: Technical/Vocational Course

## **ABDR 2255 Collision Repair Estimating 2 Credit Hours (1 Lec, 2 Lab)**

An advanced course in collision estimating and development of a damage report utilizing estimating software.

Course Type: Technical/Vocational Course

## **ABDR 2402 Auto Body Mechanical and Electrical Service 4 Credit Hours (2 Lec, 6 Lab)**

A course in the repair, replacement, and/or service of collision damaged mechanical or electrical systems. Topics include drive train removal, re-installation and service; cooling system service and repair; exhaust system service; and emission control systems. Additional topics include wire and connector repair, reading wiring diagrams, and troubleshooting.

Course Type: Technical/Vocational Course

## **ABDR 2441 Major Collision Repair and Panel Replacement 4 Credit Hours (2 Lec, 6 Lab)**

Instruction in preparation of vehicles for major repair processes.

Covers interpreting information from damage reports, planning repair sequences, selecting appropriate tools, and organizing removed parts for reinstallation.

Course Type: Technical/Vocational Course

## **ABDR 2449 Advanced Refinishing (Capstone) 4 Credit Hours (2 Lec, 6 Lab)**

Application of multi-stage refinishing techniques. Advanced skill development solving refinishing problems. Application of multi-stage refinishing techniques with emphasis on formula mixing and special spraying techniques.

Course Type: Technical/Vocational Course

## **ABDR 2453 Color Analysis and Paint Matching 4 Credit Hours (3 Lec, 3 Lab)**

Advanced course in color theory, color analysis, tinting, and advanced blending techniques for acceptable paint matching.

Course Type: Technical/Vocational Course

## **ABDR 2531 Structural Analysis and Damage Repair III 5 Credit Hours (3 Lec, 6 Lab)**

Advanced concepts in the application of theories of auto body repair and replacement of major body units.

Course Type: Technical/Vocational Course

**ABDR 2541 Major Collision Repair and Panel Replacement 5 Credit Hours (3 Lec, 6 Lab)**

Instruction in preparation of vehicles for repair including removal and reinstallation of fenders, bumpers, trims, head and door liners, locks, handles, fascia, headers, doors, tailgates, deck lids, hatches, and hoods. Interpreting information from damage reports, planning repair sequences, selecting appropriate tools, and organizing removed parts for reinstallation are also included. Special emphasis on developing safe work habits.

Course Type: Technical/Vocational Course