

Course Objectives/Course Outline
Spokane Community College

Course Title: Basic Metal Straightening and Panel Alignment and Repair

Prefix and Course Number: ABF 115

Course Learning Outcomes:

By the end of this course, a student should be able to:

- Determine the extent of impact damage
- Analyze impact damage to mechanical components
- utilize straightening and realigning techniques
- identify signs of stress and deformation on a unibody car

Course Outline:

- I. Diagnosing Major Collision Damage
 - A. Impact and Its Effects on a Vehicle
- II. Body Alignment Techniques
 - A. Basics
 - B. Straightening Equipment
- III. Repairing Auto Plastics
 - A. Types of Plastics
 - B. Plastic Repair
 - C. Chemical Adhesive Bonding Techniques
 - D. Plastic Welding Tools
 - E. Hot-air Plastic Welding
 - F. Airless Plastic Welding
 - G. Proper Welding Techniques
 - H. Special Plastic Welding Techniques
 - I. Fiberglass Auto Repairs
- IV. Other Body Shop Repairs
 - A. Replacing Glass
 - B. Door Window Glass Service
 - C. Door and Truck Locks
 - D. Locating Leaks
 - E. Headlights
 - F. Tail, Backup, and Stop Lights
 - G. Rattle Elimination
 - H. Adjusting or Replacing Bumpers
 - I. Installing Body Molding
- V. Restoring Corrosion Protection
 - A. Exposed Metal
 - B. Oxygen
 - C. Moisture