Print Date: 7/9/14

Course Objectives/Course Outline
Spokane Community College

Course Title: Introduction to Job Safety, Tools, and Equipment
Prefix and Course Number: ABF 113

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

- describe the setup of auto paint and body shop
- describe the steps needed for preparing a car for body repair
- describe safety practices used to avoid fire and explosion
- select the appropriate tool for a given job
- describe and practice the safety precautions for personal safety that must be followed in a body shop

Course Outline:

I. Body Shop Work and Safety Procedures
   A. Typical Body Shop Operations
   B. Body Shop Safety Practices
   C. Personal Safety and Health Protection
   D. General Shop Procedures

II. Body Shop Hand Tools
   A. General Purpose Tools
   B. Body Working Tools
   C. Body Surfacing Tools
   D. Hand Tool Safety

III. Body Shop Power Tools
   A. Air-powered Tools
   B. Other Pneumatic Body Shop Tools
   C. Electric-powered Tools
   D. Electric Power Tool Safety
   E. Hydraulically-powered Shop Equipment
   F. Power Jacks and Straightening Equipment
   G. Hydraulic Tool Care
   H. Hydraulic Lifts

IV. Welding Equipment and Use
   A. MIG Welding
   B. MIG Welding Equipment
   C. MIG Operation Methods
   D. Welding Position
   E. Basic Welding Techniques
   F. MIG Welding Galvanized Metals
   G. Testing with MIG Weld

H. MIG Weld Defects
I. TIG Welding
J. Resistance Spot Welding
K. Spot Welding Inspection
L. Other Spot Welding Functions
M. Stud Spot Welding for Dent Removal
N. Mod Rivet Welding
O. Oxyacetylene Welding
P. Brazing
Q. Soldering (Soft Brazing)
R. Plasma ARC Cutt8ing
S. Welding Safety