**GMAW Day 1 Chapter 8**

**Objectives**

* Select the proper arc welding machine, wire feeder, shielding gas, flow rate, contact tip, nozzle size, and welding wire type to produce an acceptable weld.
* Properly assemble and adjust all the equipment required to produce an acceptable weld using the GMAW and FCAW process.
* Identify potential safety hazards associated with the GMAW and FCAW processes and describe proper safety procedures.
* Identify shielding gas label and electrode classification

 **Lesson Content**

* Review safety procedures and personal protective equipment. (lecture)
* Machine setup discussion – describe recommendations for selection of current type, amperage range, starting amperage, voltage range, starting voltage. (lecture)
* Demonstrate machine setup – current type, polarity, starting current, work lead location, flowmeter. (demonstration)
* Ask student to setup similar machine – guide student through setup process. (guided practice)
* Ask student to identify correct shielding gas and electrode. (guided practice)

**Delivery Method**

* Lecture, demonstration, guided practice

**Learning Activities**

* Students need to inspect equipment to ensure safe operation of GMAW equipment.
* Students need to demonstration proper use of personal protective equipment.
* Instructor will demonstrate proper setup of equipment and machine settings.
* Students will demonstrate knowledge of machine setup and proper machine settings.
* Students will demonstrate knowledge of how to identify correct shielding gas and electrode classification.

**Assessment**

* Student questioning about safety practices, machine setup, and machine settings.
* Visual inspection of students machine setup and settings.