Basic Wire-Feed Welding  
Course # WD4.260

Syllabus.

Basic Wire-Feed Welding is a course designed to provide the basic information and hands-on skills required to operate the MIG Short Arc (Gas Metal-Arc Welding Short Circuiting Metal Transfer), MIG Spray Transfer (Gas Metal-Arc Welding Spray Transfer), and Gas-Shielded Flux-Cored Arc Welding processes on steel in the flat, horizontal, and vertical positions as applicable. Technical information lectures will include such information as basic machine set-up and operations, process limitations, the welding machine wire-feeding mechanism, and required shielding gas types for the Short Arc, Spray Transfer, and Gas-Shielded Flux-Core processes on steel. Prerequisite: Welding II or instructor approval.

1. Required items furnished by the students:  
   Safety glasses with sideshields*.  
   Leather welding gloves (with long gauntlet sleeves)  
   High Top Hard Top boots (no tennis shoes)  
   Suitable clothing that is non-flammable  
   Notebook or folder with paper (for taking notes).  
   Sidecutters or similar tool suitable for use with .045" diameter E70S-6 wire electrode  

   Optional but recommended: Ear plugs

   *Note: Safety Glasses are required to be worn at all times in the shop, including under welding helmets, goggles, and face shields.

2. Lectures:  
   Technical information about welding and equipment will be presented in lectures at the beginning of each class meeting.

3. Lab exercises:  

4. Grading:  
   Grading is based on evaluation of skill competency on lab assignments (Progress Card): 50% of final grade; Attendance: 35% of final grade; and Written Test Scores 15%.

   Student Grade options Available for this course:  
   A through F Letter Grade basis  
   Pass / No Pass basis  
   Audit

   Tardies: One point will be subtracted from his or her final score each time the student is Tardy.
5. **Breaks and Cleanup:**
   The instructor will announce the beginning of break time at each class session. The student is expected to return from break on time and ready to resume work. Students returning late from break will be marked Tardy.

   The instructor will announce clean-up time at the end of each class session, and then this procedure should be followed by the student:

   - Shut down welding equipment you are using.
   - Return any tools used to the proper area.
   - Return unused steel to the proper storage area.
   - Place welded pieces in the scrap container (cool if necessary).
   - Return welding rods over 2” in length to the proper box or tray in storage rack.
   - Sweep off tabletop in welding booth, and place welding stool on table (right side up).
   - Sweep floor of welding booth and put stubs and slag in metal garbage can
   - Sweep the aisle area for the welding booth being used and put the stubs and slag in metal garbage can.

   The student is free to go after completing the above procedures.

6. **Safety:**
   The student is responsible to follow all safety rules and shop procedures, and to perform all tasks in a safe and conscientious manner. This includes wearing the required safety items (safety glasses, hard top, high top boots, etc.) during the lab time.

   **Note:** The instructor will verbally warn the student when required safety items are not being worn in the shop, or when safety procedures are not being followed. **Upon the third verbal warning, the student may be withdrawn from the course by the instructor.**
Disabilities Services and Emergency Planning – Meet With Instructor Week One
If you have emergency medical information for your instructor, need special arrangements to evacuate campus, or have a documented disability, please meet with your instructor, by appointment, no later than the first week of the term, to discuss your needs. If you have a documented disability that will impact you at college and you seek accommodations, contact the Office of Disability Services (ODS) for intake and to document your disability with LBCC. Then, each term, at least two to three weeks prior to the start of classes, submit your “Request for Accommodations” form to ODS and pick up instructor letters. ODS may be reached from any LBCC campus/center by email to ODS@linnbenton.edu or by calling 917-4789. Letter pickup is available at each LBCC campus/center.