Linn-Benton Community College

**FAB & REPAIR PRACTICES I**

**CRN: 23436**

**Instructor:** Mike Brown **Course Number:** WD4.242

**Phone:** (541) 917-4592 **Office Location:** TBA

**Email:** brownm@linnbenton.edu **Office Hours:** MW 12:15 - 1:45pm

**Course Description:**

Fabrication and Repair 1 is a beginning career course stressing safety and equipment familiarization. This class introduces oxyacetylene welding and cutting practices on mild steel of various thicknesses and joint configurations in all positions. Covers basic fundamentals of fabrication and joint alignment.

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### **Learning Outcomes For This Class:**

### Upon successful completion of this course, students will be able to:

* Use Oxy-Fuel welding and cutting equipment safely.
* Set up and operate Oxy-Fuel welding and cutting equipment.
* Perform welds- flat/horizontal position.
* Name various components of welding equipment.
* Perform basic layout procedures.
* Perform cutting and fit-up of joints to be welded.

**Required items:**

-Paper and something to write with

Available in the LBCC Campus Store(Main Campus):

-Textbook: Welding Fabrication and Repair by Frank Marlow, PE

-Textbook: Welding Principles and Applications by Larry Jeffus

(same book as Basic Arc)

**Lectures**

Technical information on related welding subjects and equipment will be presented in lectures at the beginning of each class meeting.

**Lab Excercises**

Basic Oxy-acetylene (gas) welding

Braze welding and brazing

Oxy-acetylene flame cutting

**Grading**

 Grading is based on the evaluation of the following:

 Skill competency on lab assignments and practical tests:**70% of final grade**

 Quality of work on written quizzes and tests:**30% of final grade**

 Attendance: An unexcused absence of 8 class hours (one week) will result in a lowering of your grade by one complete letter.

**Homework**

Homework will be assigned throughout the term. It may include online content

and/or written exercises.

**Clean-Up**

Instructor will call clean-up at 11:35 am. There will be (2) students per week, assigned to making sure that the following is completed:

-Return all tools to the proper location, in shop.

 -Clamps, hammers, magnets, grinders, tips, strikers, pliers, etc. to tool room

-Sweep off welding and tool benches (if you grind or cut, you need to sweep)

-If your workstation has a stool, it needs to be placed on the table top, right side up

-Sweep all areas that have been used during class. (if you grind or cut, you need to sweep)

-Cool off hot metal and return to stock area, or deposit in scrap bin

 -Do not leave metal lying around the shop

 -Hot material in the burn tables may be left for later clean-up

-Properly shut down any welding or cutting equipment.

-Wrap all hoses, cords, and welding leads in an orderly fashion.

-Nothing is to be left on welders, or in bottle carts (pliers and striker are ok)

-Return electrodes, and filler material to the proper locations.

 **All students will stay and clean, until everything is finished**

**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, high top boots or shoes, 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. Repeated safety violations may require the student to be withdrawn form the course by the instructor. Three strikes and you’re out. Third warning could result in dismissed from the class.

**Personal Communication Devices**

All personal communication devices (including laptops) must be turned off or kept on silent (NOT VIBRATE) during all classes and lab times. If personal communication devices are used or go off during class or lab time, your final grade could be reduced by a full letter grade. This includes texting.

Use of radios or stereos of any kind while in the LBCC Welding Technology classrooms or labs is strictly prohibited. Students may listen to music using earbuds during lab time with instructor permission as long as the volume is kept low enough to hear and understand verbal instructions and communication from the instructor; fire alarms and other evacuation instructions. The LBCC Welding Department reserves the right to change this policy at any time without prior notice.

**LBCC is committed to inclusiveness and equal access to higher education**. If you have approved accommodations through the Center for Accessibility Resources (CFAR) and would like to use your accommodations in the class, please talk to your instructor as soon as possible to discuss your needs. If you believe you may need accommodations but are not yet registered with CFAR, please visit the [**CFAR Website**](https://www.linnbenton.edu/cfar) for steps on how to apply for services or call (541) 917-4789.

**LBCC Comprehensive Statement of Nondiscrimination**

LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws. (for further information [http://po.linnbenton.edu/BP1015 - Nondiscrimination and Nonharassment Policy.pdf](http://po.linnbenton.edu/BP1015%20-%20Nondiscrimination%20and%20Nonharassment%20Policy.pdf))

Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the Roadrunner Resource Center for support (resources@linnbenton.edu , or visit us on the web [www.linnbenton.edu/RRC](http://www.linnbenton.edu/RRC) under Student Support for Current Students). Our office can help students get connected to resources to help.