# 11/8/2020

# brcc keystone logo

Baton Rouge Community College

*Academic Affairs Master Syllabus*

Date Approved: 3 September 2020

Term and Year of Implementation: Spring 2021

**Course Title:** Pipefitting Level 2 Part 2

**BRCC Course Rubric:** PIPE 1226

**Previous Course Rubric**:

**Lecture Hours per week-Lab Hours per week-Credit Hours**: 2-8-6

**Per semester: Lecture Hours-Lab Hours-Instructional Contact Hours**: 30-120-150

**Louisiana Common Course Number:**

**CIP Code:** 46.0502

**Course Description:** Covers the National Center for Construction Education and Research (NCCER) Pipefitting Level 2 Modules 6 - 9: Socket Weld Pipe Fabrication, Butt Weld Pipe Fabrication, Excavations, and Underground Pipe Installations. Successful completion of this course requires passing the NCCER Level 2 Pipefitting Modules 6 – 9 Exams with a 70% or higher. This course requires a lab fee.

**Prerequisites:**  PIPE 1216

**Co-requisites:** None

**Suggested Enrollment Cap:** 15

**Learning Outcomes.** *Upon successful completion of this course, the students will be able to:*

1. Describe the types of socket weld and butt weld piping materials and fittings, the types and size classifications of underground piping materials, and the underground pipe installation guidelines.

2. Determine pipe lengths between socket weld and butt weld fittings, the overall fall of a sewer line, and the grade and elevation of a trench.

3. Demonstrate the appropriate method to fabricate socket weld and butt weld fittings to pipe.

4. Explain the use of shoring materials, the use of premanufactured support systems, and backfilling procedures.

5. Demonstrate the proper method to join chlorinated polyvinyl chloride (CPVC) pipe, polyvinyl chloride (PVC) pipe, and ductile iron pipe.

**Assessment Measures.** Assessment of all learning outcomes will be measured using the following methods:

1. Practical demonstrations and skills performances.

2. Homework assignments, quizzes, and tests.

3. NCCER Pipefitting Level 2 Modules 6 - 9 Exams.

**Information to be included on the Instructor’s Course Syllabi:**

* ***Disability Statement*:** Baton Rouge Community College seeks to meet the needs of its students in many ways. See the Office of Disability Services to receive suggestions for disability statements that should be included in each syllabus.
* ***Grading:*** The College grading policy should be included in the course syllabus. Any special practices should also go here. This should include the instructor’s and/or the department’s policy for make-up work. For example in a speech course, “Speeches not given on due date will receive no grade higher than a sixty” or “Make-up work will not be accepted after the last day of class”.
* ***Attendance Policy*:** Include the overall attendance policy of the college. Instructors may want to add additional information in individual syllabi to meet the needs of their courses.
* ***General Policies*:** Instructors’ policy on the use of things such as beepers and cell phones and/or hand held programmable calculators should be covered in this section.
* ***Cheating and Plagiarism*:** This must be included in all syllabi and should include the penalties for incidents in a given class. Students should have a clear idea of what constitutes cheating in a given course.
* ***Safety Concerns:*** In some courses, this may be a major issue. For example, “No student will be allowed in the lab without safety glasses”. General statements such as, “Items that may be harmful to one’s self or others should not be brought to class”.
* ***Library/ Learning Resources:*** Since the development of the total person is part of our mission, assignments in the library and/or the Learning Resources Center should be included to assist students in enhancing skills and in using resources. Students should be encouraged to use the library for reading enjoyment as part of lifelong learning.

**Expanded Course Outline:**

I. Socket Weld Pipe Fabrication

A. Socket Weld Fittings and Materials

B. Socket Weld Drawings

C. Determining Pipe Lengths Between Fittings

D. Fabricating Socket Weld Fittings to Pipe

E. Valves

II. Butt Weld Pipe Fabrication

A. Butt Weld Fittings and Materials

B. Butt Weld Drawings

C. Preparing Pipe

D. Determining Pipe Lengths Between Fittings

E. Alignment Procedures

F. Valves

III. Excavations

A. Trenching Hazards

B. Trench Safety

C. Determining Grade

D. Backfilling

IV. Underground Pipe Installation

A Underground Pipe Installation Guidelines

B. Cast Iron and Ductile Iron Pipe

C. Concrete Pipe

D. Carbon Steel, Iron Alloy, and Fiberglass Pipe

E. Thermoplastic Pipe