# 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 3 Part 1

**BRCC Course Rubric:** PIPE 1316

**Previous Course Rubric**: PIPE 2316

**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 3 Modules 1 - 5: Rigging Equipment, Rigging Practices, Standards and Specifications, Advanced Trade Math, and Advanced Motorized Equipment. Successful completion of this course requires passing the NCCER Level 3 Pipefitting Modules 1 – 5 Exams with a 70% or higher.

**Prerequisites:**  PIPE 1226

**Co-requisites:** None

**Suggested Enrollment Cap:** 15

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

1. Describe the uses of common rigging hardware and equipment, the types of manlifts, and an aerial lift inspection.

2. Demonstrate the proper method to select, inspect, and maintain special rigging equipment.

3. Calculate the sling capacities and angles, sling tension, center of gravity of a load, takeouts and other measurements using trigonometry.

4. Demonstrate the appropriate method to attach rigging hardware for routine lifts.

5. Interpret pipefitting specifications using pipefitting standards and codes.

**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 3 Modules 1 - 5 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. Rigging Equipment

A. Rigging Hardware

B. Slings and Tag Lines

C. Block and Tackle

D Hoists

II. Rigging Practices

A. Methods of Communication

B. Safety

C. Lifting Loads

D. Rigging

E. Unloading

III. Standards and Specifications

A. Standards and Codes

B. Sponsors

C. Specifications

D. Identification of Pipe Components

E. Request for Information (RFI)

IV. Advanced Trade Math

A. Table of Equivalents

B. Unit Conversions

C. Trigonometry

D. Take-Outs

V. Advanced Motorized Equipment

A. Manlifts

B. Other Types of Motorized Equipment