# 8/13/2020

# brcc keystone logo

Baton Rouge Community College

*Academic Affairs Master Syllabus*

Date Approved: 28 August 2020

Term and Year of Implementation: Fall 2020

**Course Title:** Introduction to Process Techno

**BRCC Course Rubric:** PTEC 1013

**Previous Course Rubric**: PTEC 101

**Lecture Hours per week-Lab Hours per week-Credit Hours**: 3-0-3

**Per semester: Lecture Hours-Lab Hours-Instructional Contact Hours**: 45-0-45

**Louisiana Common Course Number:**

**CIP Code:** 15.0613

**Course Description:** Introduces the field of process operations within the process industry and reviews the roles and responsibilities of process technicians, the environment in which they work, and the equipment and systems that they operate. This course requires a lab fee.

**Prerequisites:**  None

**Co-requisites:** None

**Suggested Enrollment Cap:** 24

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

1. Describe the various process industries and the roles, responsibilities, and expectations for the process technician.

2. Identify basic equipment used in process industries.

3. Describe the importance of quality, safety, health, and environment to the process industry.

4. Interpret process industry drawings.

5. Demonstrate the ability to apply basic concepts of chemistry and physics within process industries.

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

1. Assessment measures may include, but are not limited to, essays, presentations, speeches, portfolios, performances, individual and collaborative projects, in-class activities, lab reports, homework, computer-based training (CBTs) modules, quizzes, exams, industry-based standards, and/or simulated training activities.

**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:**

1. BRCC PTEC Program Overview
2. History of the Process Industry
3. Your Career as a Process Technician
4. Working on Teams
5. Soft Skills (Employability Skills)
6. Basic Physics
7. Basic Chemistry
8. Safety, Health, and the Environment
9. Principles of Quality
10. Piping and Valves
11. Tanks, Drums, and Vessels
12. Pumps
13. Compressors
14. Steam Turbines
15. Electricity and Motors
16. Heat Exchangers – Part 1
17. Heat Exchangers – Part 2 (Cooling Towers and Fin Fan)
18. Furnaces
19. Boilers
20. Distillation
21. Process Control Instrumentation
22. Process Utilities
23. Process Auxiliaries
24. Process Print Reading