

# Louisiana Delta Community College

## Academic Affairs Master Syllabus

**Course Name:** PROCESS TECHNOLOGY III-OPERATIONS/CAPSTONE

**Course Number:** PTEC 243

**Lecture hours:** 2

**Lab Hours:** 2

**Credit Hours:** 4

**Textbook, Author, and Publisher:** To be provided by College Campus

**Instructor Information:** To be provided by College Campus

**Class Location:** To be provided by College Campus

### **Course Description:**

This course teaches the operation of an entire unit within the process industry using existing knowledge of equipment, systems, and instrumentation. It studies concepts related to commissioning, normal startup, normal operations, normal shutdown, turnarounds, and abnormal situations, as well as the process technician's role in performing the tasks associated with these concepts within an operating unit. A project is required.

**Prerequisites:** Must have completed PTEC 132 and PTEC 161, with a passing score of "C" or better.

**Co-requisites:** None

### **Learning Outcomes:**

On completion of this course, the student will be able to:

1. Describe the common inspections needed to assure mechanical integrity of a system.
2. Demonstrate the correct procedures to remove energy isolation devices according to OSHA regulations.
3. Describe the tasks required to prepare utility and auxiliary systems prior to startup.
4. Recognize and explain the overall operation of a process control system or systems in normal operation.
5. Identify critical process instrumentation used to monitor the process in the field and normal and abnormal process conditions in the field using sensory perceptions and analytical measuring devices.
6. Identify appropriate corrective action given an alarm or abnormal trend of process variables using acceptable process adjustment to maintain the process within acceptable operating parameters from the field.
7. The process technician will demonstrate effective verbal and written communication skills when requesting and conveying information or issuing instructions.
8. Integrate and incorporate computer generated simulations, Simtronics, into lecture and lab.
9. Describe the major steps performed in a normal shutdown including general safety and environmental requirements and define a detailed checklist to follow for shutting down utility equipment

**Assessment Measures:** To be provided by College Campus

**Library Resource Center:**

The Delta Library and Learning Resource Center is committed to providing quality information and learning resources and services, including technology, in supporting the overall mission of Louisiana Delta Community College and its commitment to lifelong learning.

**Special Accommodations:**

Louisiana Delta Community College complies with Section 504 of the Rehabilitation Act, as well as the Americans with Disabilities Act. Students with disabilities who attend the Monroe campus may make a request by contacting the Director of Counseling and Disability Services (See College Directory for contact information.) at the beginning of each semester. Reasonable accommodations will be attempted for students with documented disabilities. If an impairment is identified later in the semester, a non-retroactive accommodation plan will be developed. Students at satellite campuses should contact the Coordinator of Student Affairs at their particular campus.

**Title IX:**

Louisiana Delta Community College is committed to protecting the rights of students, which includes compliance with Title IX requirements. As such, the institution and members of our community will not tolerate the offenses of dating violence, domestic violence, sexual assault, and stalking. Students with Title IX concerns should contact the College's Title IX Coordinator (See College Directory for contact information.) Students are required to complete Sexual Assault Awareness and Prevention Online Training. Access to this online course will be sent out through the Delta email account.

**Student Code of Conduct:**

Louisiana Delta Community College encourages an environment of academic integrity and mutual respect. Students should read and follow both academic and behavioral expectations identified in the Code of Student Conduct that can be found online at [www.ladelta.edu](http://www.ladelta.edu). Students are expected to act with integrity, respect the rights of others, and conduct themselves in a professional manner. The Honor Code prohibits academic misconduct such as cheating, engaging in unauthorized collaboration, and plagiarism. Violations of the Code of Student Conduct may result in disciplinary action as provided in the Code. Incidents are reported through the online Student Conduct system.