

# Louisiana Delta Community College

## Academic Affairs Master Syllabus

**Course Name:** PROCESS TECHNOLOGY EQUIPMENT I

**Course Number:** PTEC 161

**Credit Lecture hours:** 2      **Credit Lab Hours:** 1      **Credit Hours:** 3

**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 introduces equipment used in the process industry. It also studies many process industry-related equipment concepts including purpose, components, and operation. It emphasizes the process technician's role in operating and troubleshooting equipment.

**Prerequisites:** PTEC 101 and PTEC 131 with a grade of C or better

**Co-requisites:** PTEC 132

### **Learning Outcomes:**

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

1. Describe the operation of equipment commonly found in refining and petrochemical industries.
2. Describe basic plant equipment predictive/preventive maintenance procedures in the refining and petrochemical industries.
3. Describe the Process Technician's role in performing maintenance tasks.
4. Identify and explain the usage and purpose of all common valve types.
5. List and describe the purpose of piping, tubing, hoses and fittings in the process industry.
6. Describe and identify the typical problems associated with pipe, tubing, hoses, and fittings.
7. Describe the operating principles of compressors and pumps.
8. Integrate and incorporate computer generated simulations, Simtronics, into lecture and lab.
9. Describe the operating principles of motors and engines.
10. Work in teams to troubleshoot equipment problems and perform safety, health and environmental inspections on process equipment models using typical process diagrams.

**Assessment Measures:** To be provided by the 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 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.