

Louisiana Delta Community College

Academic Affairs Master Syllabus

Course Name: PROCESS TECHNOLOGY II-SYSTEMS

Course Number: PTEC 242

Lecture hours: 3

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 examines the interrelation of process equipment and process systems by arranging process equipment into basic systems; by describing the purpose and the function of specific process systems; by explaining how factors affecting process systems are controlled under normal conditions; and by recognizing abnormal process conditions. It also introduces the concept of system and plant economics.

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. Define terms associated with the system and explain the system theory of operation.
2. Describe and demonstrate the use of process flow diagrams and control loops associated with process variables and systems.
3. Explain the system theory of operation.
4. Describe how process industry facilities are divided into system.
5. Discuss the specific SH&E concerns associated with process systems.
6. List factors that can affect plant economics and the process technician's role in process optimization and control for different systems.
7. Compare and contrast components in batch and continuous distillation systems.
8. Compare and contrast types of separation systems.
9. Differentiate between different types of distillation systems.
10. Compare and contrast mechanical and absorption refrigeration systems.
11. Compare and contrast types of reactions that occur in industry.
12. Written and oral presentation on selected topics.
13. Describe factors that affect normal system operation.
14. Identify factors that can affect plant economics.
15. Compare and contrast control systems used in utility, auxiliary and process systems.
16. Discuss the Process Technician's role in identifying system problems.

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. 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.