Intro to Process Technology (PTAC 1302 3A1)

CREDIT

3 Semester Credit Hours (3 hours lecture, 3 hours lab)

MODE OF INSTRUCTION

Face to Face

PREREQUISITE/CO-REQUISITE:

None

COURSE DESCRIPTION

An introduction overview of the processing industries.

COURSE OBJECTIVES

Upon completion of this course, the student will be able to

- 1. Describe the roles, responsibilities, safety, environmental, and quality concepts associated with the work environment of a process technician.
- 2. Identify basic processes, equipment and systems.
- 3. Define and apply terms and symbols needed in the processing industry.

INSTRUCTOR CONTACT INFORMATION

Instructor: Kevin Carmon

Email: klcarmo1@lit.edu

Office Phone: 409-245-8758

Office Location: ExxonMobil PATC Building room 202

Office Hours: 30 minutes before class and 30 minutes after class

REQUIRED TEXTBOOK AND MATERIALS

- 1. Introduction to Process Technology, Pearson, Second Edition
 - a. ISBN number is 0-13-480824-X

ATTENDANCE POLICY

- 1. Missing more than 20% of classes will result in an automatic "F" for the course.
- 2. Absences are counted for unexcused, excused and coming to class late.
- 3. Missing more than 20% of a class period will count as an absence.

Approved: Initials/date



4. Being tardy 2 times equals 1 absence.

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

COURSE CALENDAR

| DATE | ТОРІС | READINGS | ASSIGNMENTS |
|--------|---------------------------|---------------------|--------------------|
| | | (Due on this Date) | (Due on this Date) |
| Week 1 | Course introduction and | Handouts & Textbook | |
| | policies. | (chapters 1-3) | |
| 2 | Course introduction and | Handouts & Textbook | |
| | policies. | (chapters 1-3) | |
| 3 | Power Generation | Chapter 4 | |
| | Food & Beverage | Chapter 5 | |
| 4 | Water & Wastewater | Chapter 6 | Test 1 |
| | Pulp & Paper | Chapter 7 | |
| 5 | Working as Teams | Chapter 8 | |
| | SHES | Chapter 9 | |
| 6 | Quality | Chapter 10 | |
| | Basic Physics | Chapter 11 | |
| 7 | Basic Chemistry | Chapter 12 | Test 2 |
| 8 | Process Drawings | Chapter 13 | |
| | Piping & Valves | Chapter 14 | |
| 9 | Vessels | Chapter 15 | Test 3 |
| 10 | Pumps | Chapter 16 | |
| | Compressors | Chapter 17 | |
| 11 | Turbines | Chapter 18 | |
| | Electricity & Motors | Chapter 19 | |
| 12 | Heat Exchangers | Chapter 20 | |
| | Cooling Towers | Chapter 21 | |
| 13 | Furnaces | Chapter 22 | Test 4 |
| 14 | Boilers | Chapter 23 | |
| | Distillation | Chapter 24 | |
| 15 | Process Service Utilities | Chapter 23 | |
| | Process Auxiliaries | Chapter 24 | |

| 16/17 | Instrumentation | Chapter 27 | Test 5 |
|-------|-----------------|------------|-------------|
| | | | Finals week |

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

Homework 10%

Tests 50%

Final 40%

GRADE SCALE

• 90-100 A

• 80-89 B

• 70-79 C

• 60-69 D

• 0-59 F

TECHNICAL REQUIREMENTS

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at https://lit.edu/online-learning/online-learning-minimum-computer-requirements. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at Specialpopulations. Lamar Institute of Technology (lit.edu).

STUDENT CODE OF CONDUCT STATEMENT

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT*

Catalog and Student Handbook. The LIT Catalog and Student Handbook may be accessed at www.lit.edu. Please note that the online version of the LIT Catalog and Student Handbook supersedes all other versions of the same document.

STARFISH

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

ADDITIONAL COURSE POLICIES/INFORMATION

Weekly schedule is subject to change due to unforeseen circumstances.