Process Technology I – Equipment (PTAC 1410 3C1)

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

MODE OF INSTRUCTION
Face to Face

PREREQUISITE/CO-REQUISITE:
None

COURSE DESCRIPTION
Instruction to the use of common processing equipment.

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

1. Define and use terminology.
2. Identify and describe components, basic functions and scientific principles associated with process equipment.

INSTRUCTOR CONTACT INFORMATION

Instructor:	Kevin Carmon
Email:	klcarmo1@lit.edu
Office Phone:	409-673-8302
Office Location:	ExxonMobil PATC building room 202
Office Hours:	See before class or after class

REQUIRED TEXTBOOK AND MATERIALS

1. *Process Technology Equipment,* CAPT
   ISBN number: 978-0137004126
   Simtronics Student Workbook (Optional per Instructor, Lamar University Bookstore)
2. Equipment – Lab PPE is closed toe shoes (no sandals, crocs, flip flops), shirts with sleeves (no muscle shirts), long pants.

Approved: Initials/date

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.
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	TOPIC	READINGS (Due on this Date)	ASSIGNMENTS (Due on this Date)
8/26/24	Introduction to process tech, syllabus, policies.	Ch 1	
8/28/24	Drawings	Ch 2	
9/2/24 9/4/24 9/9/24 9/11/24	Holiday Tools Piping, tubing, hoses	 Ch 3 Ch 4	 Test #1
9/16/24 9/18/24 9/23/24	Valves Pumps Compressors	Ch 5 Ch 6 Ch 7	
9/25/24 9/30/24	Turbines Motors & Engines	Ch 8 Ch 9	Homework 1 due Test #2
10/2/24 10/7/24 10/9/24 10/14/24	Power transmission, lubrication Heat exchangers Cooling towers	Ch 10, Ch 11 CH 12	Homework 2 due Test #3
10/16/24	Furnaces	Ch 13	
10/21/2410/23/24	Boilers Tanks and Vessels	Ch 14 Ch 15	
10/28/24 10/30/24	Reactors	Ch 16	 Test 4, homework 3 due
11/4/24 11/6/24	Filters, dryers, Solids handling	Ch 17 Ch 18	

11/11/24 11/13/24 11/18/24	Environmental, Auxiliary equipment	Ch 19 Ch 20	 TEST #5
11/20/24	Class reviews		Lab signoffs
11/25/24	**Class reviews**		Lab signoffs
11/27/24	**Holiday**		
12/2/24	**Finals**		
12/4//24 12/9/24	Finals Finals		Final Exam(s)

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

1. Unit tests 30%
2. Final exam 30%
3. Homework/quizzes 20%
4. Participation/lab 20%

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 Special Populations - 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.

AI STATEMENT

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI / ChatGPT in their courses.

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

Schedule subject to change due to unforeseen events.