Introduction to Process Technology (PTAC 1302 2A1)

CREDIT

3 Semester Credit Hours (3 hours lecture, 0 hours lab)

MODE OF INSTRUCTION

Online

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: Tiffany Williams-Parker

Email: tlparker@lit.edu

Office Phone: 409-257-0069

Office Location: TA5-108C

Office Hours: Office Hours

REQUIRED TEXTBOOK AND MATERIALS

Introduction to Process Technology, Pearson.

ATTENDANCE POLICY

Online class, with Blackboard course login required three times per week minimum.

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.

Approved: Initials/date



COURSE CALENDAR

Due DATE	TOPIC	Reference
9/2/24	Course orientation	Syllabus, Netiquette link.
9/15/24	Industry Knowledge	Chapter 1-7
9/15/24	Working as teams	Chapter 8
9/15/24	Health, Safety, Environmental,	Chapter 9
	Security	
	TEST 1	
10/6/24	Quality	Chapter 10
10/6/24	Basic Physics and Chemistry.	Chapter 11 and 12
10/6/24	Process drawings	Chapter 13
	TEST 2	
10/20/24	Piping, valves, vessels, pumps.	Chapter 14, 15, 16
10/20/24	Compressors	Chapters 17
	TEST 3	
11/3/24	Turbines, electricity, motors	Chapters 18, 19
	TEST 4	
11/17/24	Heat exchangers, cooling towers.	Chapters 20 and 21
11/17/24	Furnaces	Chapter 22
11/17/24	Boilers	Chapter 23
	TEST 5	
12/4/24	Distillation	Chapter 24
12/4/24	Process services utilities	Chapter 25
12/4/24	Process Auxiliaries	Chapter 26
12/4/24	Instrumentation	Chapter 27
12/8/24	Finals week	

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

Assignments 20%Discussions 10%Tests 40%Final 30%

GRADE SCALE

• 90-100 A

• 80-89 B

• 70-79 C

• 60-69 D

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@lit.edu. You may also visit the online resource at Specialpopulations—

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.

ARTIFICIAL INTELLIGENCE 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 students 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 per Instructor or LIT campus issues.