Intro to Process Technology (PTAC 1302 3A1)

CREDIT
3Semester Credit Hours (3hours lecture, 3hours 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:	Joseph Morrell
Email:	jwmorrell@lit.edu
Office Phone:	409-245-8758
Office Location:	ExxonMobil PATC Building room 202
Office Hours:	One hour before class and one hour 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

MODULE	TOPIC	READINGS (Due on this Date)	ASSIGNMENTS (Due on this Date)
8/27	PTAC1302 Orientation Course introduction and policies.		
8/29	Chapter 1 Process Technology Overview		
9/3	Chapter 2 Oil & Gas & Mining		
9/5	Chapter 3 Chemical & Pharmaceutical Industries		
9/10	Chapter 4 Power Generation		
9/12	Chapter 5 Food & Beverage		
9/17	Chapter 6 Water & Wastewater		
9/19	Chapter 7 Pulp & Paper		
9/24	Chapter 8 Working as Teams		
9/26	Chapter 9 SHES		
10/1	Chapter 10 Quality		Homework Due
10/3	**Test 1**		Test 1 in class
10/8	Chapter 11 Basic Physics		
10/10	Chapter 12 Basic Chemistry		

10/15	Chapter 13 Process Drawings		
10/17	Chapter 14 Piping & Valves		
10/22	Chapter 15 Vessels		
10/24	Chapter 16 Pumps Chapter 17 Compressors		
10/29	Chapter 18 Turbines		
10/31	Chapter 19 Electricity & Motors		
11/5	**Test 2**		Test 2 in class
11/7	Chapter 20 Heat Exchangers Chapter 21 Cooling Towers		
11/12	Chapter 22 Furnaces		
11/14	Chapter 23 Boilers		
11/19	**Test 3**		Test 3 in class
11/21	Chapter 24 Distillation		
11/26	Chapter 25 Process Service Utilities Process Auxiliaries		
12/3	Chapter 26 Process Auxiliaries		
12/5	Chapter 27 Instrumentation		
12/10	**Test 4**		Test 4 in class
12/12	**Test Final Exam**		Test Final Exam in class

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 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 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

Weekly schedule is subject to change due to unforeseen circumstances.