



PTAC-1302 – 101CL

Intro to Process

Summer 2022

TTH 8a-10:15a

TTH 6p-8:15p

Instructor Information: Angela Provost, email, 409.933.8536

Student hours and location: Contact to set up appointment

Required Textbook/Materials: **Introduction to Process Technology, Second edition Technical Editor Martha McKinley**

Course Description: This is the introduction to chemical and refinery plant operations. Topics include process technician duties, responsibilities and expectations; plant organizations; plant process and utility systems; and the physical and mental requirements of the process technician. The student will relate an overview of a typical process plant; identify process equipment; state the purpose of equipment; describe safety, health, and environmental components; and describe the roles, responsibilities, and work environment.

Course requirements: Prerequisite: TSIA2 945-990 ELAR/CRC test AND 5 or higher on Essay OR 910-944 on CRC with 5-6 on Diagnostic Test + 5 or higher on Essay, or [IRW 0320](#) with a grade of "C" or better.

Determination of Course Grade/Detailed Grading Formula: (methods of evaluation to be employed to include a variety of means to evaluate student performance)

Late Work, Make-Up, and Extra-Credit Policy: Late work or make up assignments will be permitted. Extra – Credit assignments or not mandatory but strongly encouraged.

Attendance Policy: Attendance helps students learn the course material.

Absent students cannot contribute their unique perspectives to class discussion or other group work, negatively affecting other students' learning opportunities. It is the student's responsibility to ensure all assignments are completed and submitted on the instructed due date.

Communicating with your instructor: ALL electronic communication with the instructor must be through your COM email. Due to FERPA restrictions, faculty cannot share any information about performance in the class through other electronic means.

Student Learner Outcome	Maps to Core Objective	Assessed via this Assignment
Describe the roles, responsibilities, safety, environmental, and quality concepts associated with the work environment of a process technician.	Reading, writing, Listening, Critical Thinking	Study of the related chapters in the textbook covering said topics and followed up with testing
Identify basic processes, equipment and systems.	Reading, Writing, Critical Thinking, Mathematical Literacy.	Written testing and “Hands-On” identification of equipment.

Academic Dishonesty:

Academic dishonesty is seen as an intentional act of fraud, in which a student seeks to claim credit for the work or efforts of another without authorization, or uses unauthorized materials or fabricated information in any academic exercise. As institutions, we also consider academic dishonesty to include forgery of academic documents, intentionally impeding or damaging the academic work of others, assisting other students in acts of dishonesty or coercing students into acts of dishonesty. If a student is suspected of these acts, it will be submitted to a higher level review. The consequences can range up to dismissal of the program.

Student Concerns: If you have any questions or concerns about any aspect of this course, please contact me using the contact information previously provided. If, after discussing your concern with me, you continue to have questions, please contact Derrick Lewis, Chairman at 409.938,1211.

Course outline: See Page 2 for details

Institutional Policies and Guidelines

Grade Appeal Process: Concerns about the accuracy of grades should first be discussed with the instructor. A request for a change of grade is a formal request and must be made within six months of the grade assignment. Directions for filing an appeal can be found in the student handbook. <https://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.pdf. *An appeal will not be considered because of general dissatisfaction with a grade, penalty, or outcome of a course. Disagreement with the instructor’s professional judgment of the quality of the student’s work and performance is also not an admissible basis for a grade appeal.* https://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.pdf

Academic Success & Support Services: College of the Mainland is committed to providing students the necessary support and tools for success in their college careers. Support is offered through our Tutoring Services, Library, Counseling, and through Student Services. Please discuss any concerns with your faculty or an advisor.

ADA Statement: Any student with a documented disability needing academic accommodations is requested to contact Holly Bankston at 409-933-8520 or hbankston@com.edu. The Office of Services for Students with Disabilities is located in the Student Success Center.

Counseling Statement: Any student needing counseling services is requested to please contact Holly Bankston in the student success center at 409-933-8520 or hbankston@com.edu. Counseling services are available on campus in the student center for free and students can also email counseling@com.edu to set up their appointment. Appointments are strongly encouraged; however, some concerns may be addressed on a walk-in basis.

Textbook Purchasing Statement: A student attending College of the Mainland is not under any obligation to purchase a textbook from the college-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Withdrawal Policy: Students may withdraw from this course for any reason prior to the last eligible day for a “W” grade. Before withdrawing students should speak with the instructor and consult an advisor. Students are permitted to withdraw only six times during their college career by state law. The last date to withdraw from the 1st 8-week session is October 5. The last date to withdraw from the 16-week session is November 18. The last date to withdraw for the 2nd 8-week session is December 1.

F_N Grading: The F_N grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The F_N grade may be issued for cases in which the student ceases or fails to attend class, submit assignments, or participate in required capacities, and for which the student has failed to withdraw. The issuing of the F_N grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an F_N grade.

Early Alert Program: The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention are very important to us. I have been asked to refer students to the program throughout the semester if they are having difficulty completing assignments or have poor attendance. If you are referred to the Early Alert Program you will be contacted by someone in the Student Success Center who will schedule a meeting with you to see what assistance they can offer in order for you to meet your academic goals.

Resources to Help with Stress:

If you are experiencing stress or anxiety about your daily living needs including food, housing or just feel you could benefit from free resources to help you through a difficult time, please click here <https://www.com.edu/community-resource-center/>. College of the Mainland has partnered with free community resources to help you stay on track with your schoolwork, by addressing life issues that get in the way of doing your best in school. All services are private and confidential. You may also contact the Dean of Students office at deanofstudents@com.edu or communityresources@com.edu.

Course outline: 16 Week Course Calendar*

Week#	Day/Date	Topic	Reading Assignments & Homework Due Dates
1	T 6/7	Introduction, Syllabus, Safety Topics, Diversity Assignment, Sugar Reactor P&ID, Ice Breaker Exercise	Read Chapters 1-4, 6
2	TH 6/9	Chapter 1-PTEC Overview Chapter 2-Oil & Gas Industry Chapter 3-Chemical Industry Chapter 4-PowerGeneration Industry Chapter 6-Water/Wastewater Industries	Review Chapter 1-4, 6
3	T 6/14	Review Sugar Reactor P&ID	Review for Exam 1
4	TH 6/16	Exam 1 Sugar Reactor P&ID	Read Chapters 8, 13, 25 & 27 Work on P&ID
5	T 6/21	Chapter 8-Working as Teams Chapter 13-Process Drawings Chapter 25-Process Service Utilities Chapter 27-Instrumentation	Work on P&ID
6	TH 6/23	Review Sugar Reactor P&ID	Work on P&ID
7	T 6/28	Exam 2 Sugar Reactor P&ID DUE	Read Chapters 14-15, 24 & 26
8	TH 6/30	Chapter 14-Piping and Valves Chapter 15-Vessels Chapter 24-Distillation Chapter 26-Process Service Utilities	Review Chapters 14-15, 24 & 26
9	T 7/5	Review Assign Teams for Diversity Assignment	Review requirements for Diversity Assignment Review for Exam 3
10	TH 7/7	Exam 3	Read Chapters 16-19 Diversity Assignment
11	T 7/12	Chapter 16-Pumps Chapter 17-Compressors Chapter 18-Turbines Chapter 19-Electricity and Motors	Diversity Assignment
12	TH 7/14	Review Diversity Assignment	Diversity Assignment Review for exam
13	T 7/19	Exam 4	Read Chapters 20-23 Diversity Assignment
14	TH 7/21	Chapter 20-Heat Exchangers Chapter 21-Cooling Towers Chapter 22-Furnaces Chapter 23-Boilers Diversity Assignment Due	Review Chapters 20-23
15	T 7/26	Review Present Diversity Assignment	Read LOTO, Permits, Procedures
16	T 7/28	LOTO, Permits, Procedures	Review ALL material for final

17	TH 8/4	Review LOTO, Permits, Procedures	Review for Final
18	T 8/9	Exam 5	Enjoy the rest of Summer! See you in the Fall!

*Schedule is subject to change at the discretion of the instructor(s).