

## PTAC 1302-141CL PTAC 1302-241CL Intro to Process Technology Fall 2022

Tuesday 9a-11:50a (Industrial Careers, Bldg. #23, Room 203) Wednesday 6p-8:50p (Technical Vocation, Bldg. #5, Room 1555)

Instructor Information: Angela Provost, aprovost@com.edu, PH: 409-933-8536

Student hours and location: Contact to schedule appointment

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

**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:** To advance in this program you must pass class with a "C" or better.

Late Work, Make-Up, and Extra-Credit Policy: Late work or make up assignments will NOT be permitted. Should an emergency occur, it is students' responsibility to contact instructor immediately to make arrangements, otherwise your grade will result in a ZERO. 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 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.<<u>https://build.com.edu/uploads/sitecontent/files/student-services/Student\_Handbook\_2019-2020v5.pdf</u>. *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 Michelle Brezina at 409-933-8124 or <u>mvaldes1@com.edu</u>. The Office of Services for Students with Disabilities is located in the Student Success Center.

**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 1<sup>st</sup> 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 2<sup>nd</sup> 8-week session is December 1.

**FN Grading:** The FN grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The FN 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 FN grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an FN 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 <u>https://www.com.edu/community-resource-center/</u>. 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 <u>deanofstudents@com.edu</u> or <u>communityresources@com.edu</u>.

## Course outline: 16 Week Course Calendar\*

Week#	TW/Date	Торіс	Reading Assignments & Homework Due Dates
1	8/23-24	Introduction, IceBreaker, Syllabus,	Complete Homework
		Safety Topics	Read Chapters 1-3
2	8/30-31	Chapter 1-PTEC Overview	Read Chapters 4-8
		Chapter 2-Oil & Gas Industry	_
		Chapter 3-Chemical Industry	
3	9/6-7	Chapter 4-PowerGeneration Industry	Study Exam 1
		Chapter6-Water/Wastewater	
		Industries	
		Chapter 8-Working as Teams	
4	9/13-14	Exam 1	Read Chapters 13,25,27
5	9/20-21	Chapter 10-Quality	
		Chapter 11- Basic Physics	
		Chapter 12- Basic Chemistry	
6 9/27	9/27-28	Chapter14 – Piping Valves	Study Exam 2
		Chapter 15- Vessels	
		Review Exam 2	
7	10/4-5	Exam 2	Read Chapter 16-17
8	10/11-12	Chapter 16- Pumps	Study Exam 3
		Chapter 17- Compressors	
		Diversity Assignment -assign groups	
9	10/18-19	Exam 3	Read Chapters 18-19
10	10/25-26	Chapter 18- Turbines	Read Chapters 20-21
		Chapter 19- Electricity & Motors	
11	11/1-2	Chapter 20- Heat Exchangers	Study Midterm
		Chapter 21- Cooling Towers	Diversity Assignment
12	11/8-9	Present Diversity Assignment	Study Midterm
		Review Midterm	
13	11/15-16	MIDTERM (Exam 4)	
		Thanksgiving Break	Read Chapters 22-23
14	11/29-30	Chapter 22- Furnaces	Read Chapters 25-26
		Chapter 23- Boilers	
		Chapter 24- Distillation	
15	12/6-7	Chapter 25- Process Service Utilities	Study Final
		Chapter 26- Process Aux	
16	12/13-14	FINAL (Exam 5)	Enjoy Winter Break!

\*Check BrightSpace daily for updates to calendar