

# PTAC 1310.201C3 Process Technology-Equipment Spring 2025

6:00pm - 8:20pm / Monday & Wednesday

**Instructor Information:** Lenora Dawson, ldawson1@com.edu, 409-933-8305

ICB RM# 207-12 Office

**Student hours and location:** 

ICB #207-12

Mon: 7a-8a; 11a-12p; 5p-6p

**Tues: 4:30p-6p** 

Wed: 7a-8a; 11a-12p; 5p-6p

Required Textbook/Materials: PROCESS TECHNOLOGY EQUIPMENT

NAPTA-2 ND EDITION ISBN-13: 978-0-13-489126-2

**Course Description:** PTAC 1310 PROCESS TECHNOLOGY

**CREDIT 4 WECM** 

Course requirements: Exams, Homework, Labs, & Individual Safety Presentations

**Determination of Course Grade/Detailed Grading Formula:** 

Exams – 80% Homework – 10% Labs – 10%

Individual Safety Presentations – Extra on lowest exam

A= 90% - 100%

B= 80% - 89%

C= 70% - 79%

D= 60% - 69%

F= Below 60%

Late Work, Make-Up, and Extra-Credit Policy: No late work will be accepted after the due date has passed. There is no extra credit in this class.

You must give Instructor at least 2hrs prior notice of non-attendance before a scheduled class in which work is due. You will have 48 business hours from the original due date to turn in your assignment/take exam. You may only take 2 exams/quizzes in one class day. If you DO NOT give at least 2hrs notice/inform Instructor of your non-attendance, you will NOT be allowed to turn in missed assignments or take missed exams/quizzes. NO EXCEPTIONS. There is no extension for the Final Exam.

Attendance Policy: Much of the learning occurs in the classroom setting through lectures and labs. It is difficult to learn all the concepts simply by reading the course textbook, although reading the textbook is essential to being successful in this course. Class participation is essential to learning. Many of the class sessions cover topics that have no handouts. Good note taking is important to be successful in this class. Attendance is taken each class period and excessive missed classes (6) can result in the instructor dropping you from the course. Coming to class late (more than 30 minutes) will be counted as an absence. Also, leaving the class early (before being released by the instructor) may result in an absence.

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. (Faculty may add additional statement requiring monitoring and communication expectations via D2L or other LMS)

**Core Objectives:** Students successfully completing this course will demonstrate competency in the following Core Objectives:

- 1. **Critical Thinking Skills:** Students will demonstrate creative thinking skills, innovation, and ability to analyze, evaluate and synthesize information.
- 2. **Communication Skills:** Students will develop, interpret, and express ideas through written, oral, and visual communication.
- 3. **Personal Responsibility:** Students will demonstrate the ability to connect choices, actions and consequences to decision making.

Student Learner Outcome	Maps to Core Objective	Assessed via this Assignment
Define and use terminology	*Critical thinking	Homework, Exams, Quizzes,
		Labs
Identify and describe	*Critical Thinking	Homework, Exams, Quizzes,
components, basic	*Communication-writing	Class Attendance, Safety
functions and scientific	*Personal Responsibility-	Presentations, Team Activities
principles associated with	attendance and communication	and Labs
process equipment.	with instructor	

**Academic Dishonesty:** Any incident of academic dishonesty will be dealt with in accordance with college policy via the Student Handbook. Academic dishonesty – such as cheating on exams is an extremely serious offense and will result in a **grade of zero** on that exam and the student will be referred to the Office of Student Conduct for the appropriate discipline action. IN OTHER WORDS, If the student is caught cheating on any classwork of any kind, they get an immediate 0% for that grade. If two students copy each other's work, both get zeros."

**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, Department Chair at 409-933-8607 office dlewis22@com.edu email.

#### **Course outline:**

## MON/WED PTAC-EQUIPMENT 6:00pm-8:20pm

**Course outline:** \*\*Schedule is subject to change at the discretion of the instructor based on instruction and/or course needs. \*\*

Week#	Topic	Reading Assignments & Homework Due Dates
1	Purchase books from bookstore or	
1/13	online. Introduction, Syllabus,	Read Chapters 1
Mon	Assignments, Lab, Safety Topics,	
	Homework, Ice Breaker Exercises	
1/15	Chapter 1 Intro to Process Equipment &	Read Chapter 2
Wed	LAB	
2	HOLIDAY- MLK	
1/20		
Mon		
1/22	Chapter 2 Process Drawings and Industry	Read Chapter 3
Wed	Standards	
	LAB	
3	Chapter 3 Tools	Read Chapter 4
1/27	LAB	
Mon		
1/29	Chapter 4 Piping, Gaskets, Tubing, Hoses,	Read Chapter 5
Wed	and Fittings	
	LAB	
4		
2/3	Chapter 5 Valves	Study Exam 1- (Ch. 1,2,3,4,5)
Mon	LAB	

	HOMEWORK DUE: (CH. 1,2,3,4,5)	
<u>2/5</u>	Review-Exam 1- (Chapters 1, 2, 3, 4,5)	
Wed	LAB	
5	Exam 1 (Ch. 1,2, 3, 4, 5)	Read Chapter 6
2/10		
Mon		
2/12	Chapter 6 Pumps	Read Chapter 7
Wed	LAB	
6	Chapter 7 Compressors	Read Chapter 8
2/17	LAB	
Mon		
2/19	Chapter 8 Turbines	Study Exam 2- (Ch. 6,7,8)
Wed	LAB	
	HOMEWORK DUE: (CH. 6,7,8)	
7	Review-Exam 2- (Chapters 6, 7, 8)	Study Exam 2- (Ch. 6,7,8)
2/24	LAB	
2/26	Exam 2 (Ch. 6, 7, 8)	Read Chapter 11
Wed		·
8	Chapter 11 Heat Exchangers	Read Chapter 12
3/3	LAB	·
Mon		
3/5	Chapter 12 Cooling Towers	Read Chapter 13
Wed	LAB	·
9	Chapter 13 Furnaces	Read Chapter 14
3/10	LAB	'
Mon		
3/12	Chapter 14 Boilers	Study Exam 3 – (Ch. 11, 12, 12, 14)
Wed	LAB	(0.11 = 2, = 2, = 2, = 3,
	HOMEWORK DUE: (CH. 11,12,13,14)	
10	SPRING BREAK	Study Exam 3 – (Ch. 11, 12, 12, 14)
3/17		(3 ==, ==, ==, ==, ==,
Mon		
3/19	SPRING BREAK	Study Exam 3 – (Ch. 11, 12, 12, 14)
Wed		(5 2-, 2-, 2-, 2-,
11	Review-Exam 3- (Chapters 11, 12)	Study Exam 3 – (Ch. 11, 12, 12, 14)
3/24	LAB	(6111 11, 12, 12, 14)
Mon		
3/26	Review-Exam 3- (Chapters 13, 14)	Study Exam 3 – (Ch. 11, 12, 12, 14)
	LAB	Judy Lami 3 – (Cil. 11, 12, 12, 14)
Wed		

12	Exam 3 (Ch. 11, 12, 13, 14)	Read Chapter 15
3/31		·
Mon		
4/2	Chapter 15 Vessels	Read Chapter 16
Wed	LAB	·
13	Chapter 16 Reactors	Read Chapter 17
4/7	LAB	
Mon		
4/9	Chapter 17 Filters and Dryers	Study Exam 4 (Ch. 15, 16, 17)
Wed	LAB	
	HOMEWORK DUE: (CH. 15,16,17)	
14	Review-Exam 4-(Chapters 15, 16, 17)	
4/14	LAB	
Mon		
4/16	Exam 4 (Ch. 15, 16, 17)	Read Chapter 18
Wed		
15	Chapter 18 Solids Handling Equipment	W-Day 4/21
4/21	LAB	Read Chapter 19
Mon		
4/23	Chapter 19 Environmental Control	Read Chapter 20
Wed	Equipment	
	LAB	
16	Chapter 20 Auxiliary Equipment	
4/28	LAB	
Mon	HOMEWORK DUE: (CH. 18,19,20)	
4/30	Review-Exam 5-(Chapters 18, 19, 20)	
Wed	LAB	
17	Exam 5 (Ch. 18, 19, 20)	
5/6		
5/7	Final Grades-Due	Grades Due by 11:00am

## **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 <a href="https://www.com.edu/student-services/docs/Student\_Handbook\_2023-2024\_v2.pdf">https://www.com.edu/student-services/docs/Student\_Handbook\_2023-2024\_v2.pdf</a> 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.

**Academic Success & Support Services:** College of the Mainland is committed to providing students with 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 Kimberly Lachney at 409-933-8919 or <a href="mailto:klachney@com.edu">klachney@com.edu</a>. The Office of Services for Students with Disabilities is 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 1st 8-week session is February 26. The last date to withdraw from the 16-week session is April 21. The last date to withdraw for the 2nd 8-week session is April 30.

**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 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 <a href="https://www.com.edu/community-resource-center/">https://www.com.edu/community-resource-center/</a>. 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 <a href="maintenance-deanoft-de