



**CTEC-2445-111CL & 112CL
UNIT OPERATIONS
SUMMER 2021
Tues. - Thurs. 8:30a - 2:55p**

Instructor Information:

Jon Leacroy & **Adrian Mejia**
jleacrov@com.edu amejia5@com.edu

409-933-833-8556 409 933-8140

Communicating with your instructor: ALL electronic communication with the instructor must be through your COM e-mail due to FERPA restrictions.

Instructors Office hrs.:

JL: Tues: 12p. - 3p
AM: Mon: 12p. - 3p.
Office Area Rm. 1583

Required Textbook:

Pocket Reference by Thomas Glover (Black Book) (ISBN: 978-1-885071-62-0)

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 on-line retailer.

Course Description:

Unit Operations is the capstone course in the College of the Mainland Process Technology Associate Degree Program. It is a “hands-on” based course that teaches students to understand, operate and troubleshoot the Glycol Distillation Training Unit, Lattner Fire Tube Boiler and related systems. Students will learn to trace lines and draw P&IDs (Piping & Instrumentation Diagrams) and write SOPs (Standard Operating Procedures). Safety and Environmental issues will be stressed and monitored throughout the course. The 6 steps in “real time” troubleshooting will be taught and students will be given the opportunity to actually troubleshoot the Glycol Separation Unit (GSU). During the final weeks of the semester students will safely “start-up” and operate the GSU.

Course requirements (including description of any special projects or assignments):

This is based on completion of all Assignments, Quizzes and Exams.

It is the responsibility of the student to keep up on Blackboard

Students are required to have proper Personal Protective Equipment (PPE) when operating the GSU/Boiler. Students not having proper PPE will be dismissed from class.

Make-Up Policy:

- 1) Exams will be made up only for absences in which students are involved in a life threatening emergency. No Exceptions!
- 2) Students who walk out of an exam will be given a score of zero for it. There will not be a makeup of that exam.
- 3) **Make up quizzes will not be allowed. This will be strictly enforced. A grade of zero will be given in those cases.**
- 4) Points will be taken out for tardiness and absenteeism. Leaving class early (without instructors' approval) will be counted as being absent from class.

Classroom Conduct Policy: College of the Mainland requires that students enrolled at COM be familiar with the Standards of Student Conduct, which can be found in the on-line Student Handbook. Students should act in a professional manner at all times. Disruptive students will be held accountable according to college policy. Any violations of the Code of Conduct will result in a referral to the Office for student Conduct may result in dismissal from this class.

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

Grading is based on multiple quizzes and exams. Your grade is based on a points system.

Class attendance is mandatory during the 40 hr. run at the end of the semester. If the 40 hr. run is missed you will receive an I for a grade until you complete the 40 hr. run at the end of the Fall semester.

Grading Scale:**A = 1475 - 1328****B = 1327 - 1187****C = 1186 - 1033****D = 1032 - 885****F Below 885**

Week#	Day/Date	Topic	Quiz & Info
1	Week of 6/7/21	Intro - Syllabus - Expectations - General Review- Cover Resumes - Distillation Lecture GSU Review	Quiz on Distillation & You-Tube Video
		Walk out Feed Section Quiz: Distillation & Dp	50 pts
2	Week of 6/14/21	Study Feed System - Feed Quiz - Look at Resumes	50 pts
		Walk Out Btms. - Study Btms. - Fd/ Btms Quiz	100 pts
3	Week of 6/21/21	Study Overhead System - Fd/Btms/OH Quiz	100 pts
		Study Steam System	
4	Week of 6/28/21	Study Steam System - Fd/Btms/Oh/Steam Quiz	100 pts
		Practice Drawings on Board - Start Board Quizzes	200 pts
5	Week of 7/5/21	Finish Board Quizzes	
6	Week of 7/12/21	Final P&Id Due - Cover lining up Feed/ Btms/Vac	200 pts
		Run Fd/Btms Circulation Inside & Outside Handout	
7	Week of 7/19/21	Run Whole Unit - Discuss Trouble Shooting Steps	
		Quiz: Stand and Point/Line-up	200 pts
8	Week of 7/26/21	Quiz: Inside Steps - Run Whole Unit - Troubleshoot	125 pts
		Trouble-Shoot - Quiz: Outside Steps	100 pts
9	Week of 8/2/21	Hand tools and Pipe Fittings - Valve Response	
		Valve Response & Quiz - Hand out Review Questions	150 pts
10	Week of 8/9/21	40 Hr Run - Review Questions Due - Debrief	100 pts

Schedule is subject to change at the discretion of the instructors.

The instructor reserves the right to make changes to this syllabus & the schedule during the semester as needed to facilitate instruction and/or course needs.

Attendance Policy:

Unit Operations is a "hands-on" course without a text book or handouts. Class attendance, participation, and good note taking are essential to learning and the successful completion of this class.

If you find that you are going to miss a scheduled class for any reason, please notify both your professors via E-Mail (with cc to Patricia England) as soon as possible. Makeup work is the responsibility of the student and making contact with fellow classmates is highly encouraged to get details on missed assignments.

Note: "Attendance Log" sign-in is the responsibility of the student. Make sure you sign the roll sheet each class day.

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 only permitted to withdraw six times during their college career by State law.

The last day to withdraw from class is August 2nd, 2021. If you withdraw after this date, you will receive the grade of "F."

Early Alert Program: The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention is very important to us. We 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.

Academic Dishonesty:

Any incident of academic dishonesty will be dealt with in accordance with college policy and the Student Handbook. Academic dishonesty – such as cheating on assignments, quizzes, and exams is an extremely serious offense and will result in a grade of zero and the student will be referred to the Office of Student Conduct for the appropriate discipline action.

Plagiarism: Plagiarism is using someone else's words, drawings or ideas and claiming them as your own. Plagiarism is a very serious offense. Plagiarism includes paraphrasing someone else's words without giving proper citation, copying directly from a website and pasting it into your paper, using someone else's words without quotation marks, or copying someone else's drawings or assignments in part or in full. Any assignment containing any plagiarized material will receive a grade of zero and the student will be referred to the Office of Student Conduct for the appropriate discipline action.

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 the PTEC Program coordinator (Mr. Derrick Lewis / (409) 933- 8607 / dlewis22@com.edu) or Department Chair (Dr. Carla Boone / (409) 933- 8616 / CBoone@com.edu)

Student Learner Outcome	Maps to Core Objective	Assessed via this Assignment
1. Describe and Demonstrate Understanding of Unit Operations concepts	* Critical Thinking * Social Responsibility	Startup, Troubleshoot and Shutdown the PTEC Glycol Separation Training Unit. (GSU)
2. Solve elementary chemical mass/energy balance	* Empirical Skills	Quizzes, Exams
3. Use the interpretation of analytical data in the application of distillation and fluid flow principles	* Critical Thinking	Quizzes, Exams

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 career. 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: Counseling Statement: Any student that is needing counseling services is requested to please contact Kelly Waters in the student success center at 409-933-8618 or kwaters@com.edu Counseling services are available on campus in the student center for free and students can also email counseling@com.edu to setup their appointment.

COVID-19 Statement: All students, faculty, and staff are expected to familiarize themselves with materials and information contained on the College of the Mainland's Coronavirus Information site at www.com.edu/coronavirus. In compliance with Governor Abbott's May 18 Executive Order, face coverings/masks will no longer be required on COM campus. Protocols and college signage are being updated. We will no longer enforce any COM protocol that requires face coverings. We continue to encourage all members of the COM community to distance when possible, use hygiene measures, and get vaccinated to protect against COVID-19. Please visit com.edu/coronavirus for future updates.