

### Course Number and Sections: PTAC-2420-211CL Name of Course: Process Tech II-SYSTEMS Course Semester: SUMMER 2021 Time and days of course: TTH 5:00PM - 9:50PM

Instructor Information: Al Jivan <u>ajivan@com.edu</u> 409-933-8542

**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 hours and location: TVB 1583C

• Tuesday / Thursday: 1:00 - 2:00 PM & 4:00 - 5:00 PM

Will respond to emails within 24 hours except on weekends.

### **Required Textbook:**

Systems Textbook: Process Technology Systems by Speegle (ISBN: 978-1-4180-3999-8)

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 online retailer.

### **Course Description:**

Process Technology II – Systems is one of the eight core courses in the Process Technology Curriculum, sponsored by the North American Process Technology Alliance. The two-year program has been created to train students for careers as Process Technicians in the chemical and refining process industries. This course is a critical building block in preparation for PTAC Operations, Unit Operations and Troubleshooting. All prerequisites must be met. Process Technology II – Systems introduces students to many process industry related Systems concepts including basic systems, the purpose and function of specific process systems, the methods of controlling process systems and abnormal process conditions. A strong emphasis in distillation basics and operation will be pursued.

### **Course requirements:**

This is based on completion of all HW's, Assignments, Quizzes and Exams on time.

### Other info regarding HW's, Assignments, Quizzes and Exams:

1) Students are required to put **Name and Date** on their HW's, assignments, quizzes and exams. Points will be deducted (at instructor's discretion) for not complying.

2) For HW's, assignments, etc., **pages must be stapled** – (loose pages will not be accepted). **Homework is due at the beginning of class - on due date.** 

3) Students are required to take quizzes and exams with their own class, and during the allowed time only.

4) Students will turn in the same number of pages that are handed out during a quiz or an exam. If not, you will get a score of zero for the quiz or the exam. Also, students who do not turn in their quiz or exam (i.e. walk out with the quiz or the exam) will get an "F" for the course.

5) Students will not make copies or take pictures of quizzes and exams (including graded). This will result in an immediate "F" for the course.

#### **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.

**Electronic devices** (e.g. cell phones, pagers, cameras, I-pads, I-pods, tape recorders, etc.) **shall not be used in the classroom or during the exams/quizzes**. Only calculators will be allowed – (cell phones or any other electronic devices shall not be used as calculators). If you need to use your cell phone, step out of the class.

•Students using such devices during the exams/quizzes will result in an immediate "F" for the course.

### Make-Up Policy:

1. Make-up exams should be scheduled with your instructor ASAP (preferably prior to the exam), and should be taken by the next class period or within 5 working days of the original date, whichever comes first. Penalty for make-up exams will be a deduction of 10% of the score made, unless the make-up exam was scheduled prior to the original exam date. After 5 working days, a grade of 0 (zero) will be entered for that exam. At the instructor's discretion, make up exams may be in a different format from the scheduled exam. **There will not be a make up for Exam #3.** 

2. Make up exams will not be allowed after 5 working days past their original date. This will be strictly enforced. **Only 1 make-up exam will be allowed (with excused absence only).** 

3. 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.

4. Make up quizzes will not be allowed. This will be strictly enforced. A grade of zero will be given in those cases.

5. Late or make up homework/assignments will not be allowed. This will be strictly enforced. A grade of zero will be given in those cases.

6. Make up exams, graded quizzes, homework, class handouts and other works are the responsibility of the student and not that of the Instructor.

# 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 total percentage point system:

### (Grading subject to change at the discretion of the instructor)

Homeworks & Quizzes (Combined Total)	10% (Weighted % Score)
3 Exams (30% Each)	90%

**TOTAL SCORE = 100%** 

### **Grading Scale:**

- A = 90 100%
- B = 80 89%
- C = 70 79%
- $\mathbf{D} = 60 69\%$
- $\mathbf{F} = \text{Below 60\%}$

### Summer 2021 Course Schedule\*:

Week#	Day/Date	Topic (Read chapters prior to class)	Assignments, Quizzes & Due Dates (TBA)
1	T 6/8/21	Intro + Syllabus + Expectations + Explain Grading % + General Review	
	TH 6/10/21	L: GENERAL REVIEW	
2	T 6/15/21	L: CHP. 1,3, 4, 6 > WATER SYSTEMS, PLANT AIR, INSTR AIR, NITROGEN	
	TH 6/17/21	L: CHP. 5 > COOLING TOWER + COOLING WATER SYSTEM	
3	T 6/22/21	L: CHP. 7,10,12 > NATURAL & FUEL GAS, ELECT, REFRIGERATION General Overall Review	
	TH 6/24/21	EXAM # 1	Exam #1 (Timed & Beginning of Class)
4	T 6/29/21	L: CHP. 11 > RELIEF & FLARE + THERMAL OXIDIZER	
4	TH 7/1/21	Misc. + Overall Review	
5	T 7/6/21	L: CHP. 8, 9 > BOILERS, BFW, STEAM, CONDENSATE	
	TH 7/8/21	L: CHP. 18 > REACTORS	
6	T 7/13/21	L: CHP. 14 > FURNACES / COMBUSTION General Overall Review	
0	TH 7/15/21	EXAM # 2	Exam #2 (Timed & Beginning of Class)
7	T 7/20/21	<ul> <li>L: CHP. 21, 22 &gt; FILTRATION, DRYING</li> <li>L: CHP. 19 &gt; CENTRIFUGE SYSTEM</li> <li>L: CHP. 23 &gt; MATERIAL STORAGE</li> </ul>	
	TH 7/22/21	L: CHP. 15, 16, 17 > EXTRACTION, ABSORPTION, ADSORPTION, STRIPPING	
8	T 7/27/21	L: CHP. 13 > DISTILLATION > PART-1	
	TH 7/29/21	QUIZ (Binary Distillation) L: CHP. 13 > DISTILLATION > PART-2	Quiz (Timed & Beginning of Class)
9	T 8/3/21	MISC. / Q&A / Tour of GSU, Boiler, Chiller General Overall Review	
	TH 8/5/21	EXAM # 3	Exam #3 (Timed & Beginning of Class)
10	T 8/10/21	<ul><li>Semester de-briefing + Unit Ops preview</li><li>Final Grades</li></ul>	
10	TH 8/12/21	Last Day of class	

\*Schedule is subject to change at the discretion of the instructor.

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:**

It is encouraged that students attend classes. Student participation is essential to learning. Good note taking is important to be successful in this class.

Makeup work is the responsibility of the student and making contact with fellow classmates is highly encouraged.

# Note: "Attendance Log" sign-in is the responsibility of the student. If not signed in, you will be recorded as being absent for that class. After the fact sign-in will not be allowed.

**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. 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.

### **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 (copying someone else's assignments in part or in full) or 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.

**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 Department Chair (Mr. Derrick Lewis / (409) 933- 8607 /dlewis22@com.edu).

Student Learner Outcome	Maps to Core Objective	Assessed via this Assignment
1. Describe the purpose and	Critical Thinking	HW's, Quizzes, Exams, Class
function of common process	Empirical and Quantitative	attendance & participation
systems	skills	
	Personal Responsibility -	
	attendance	
2. Explain and demonstrate	Critical Thinking	HW's, Quizzes, Exams
the operation of each process	Empirical and Quantitative	
system	skills	

**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\_2020-2021\_v2.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.

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 <u>hbankston@com.edu</u>. The Office of Services for Students with Disabilities is located in the Student Success Center.

**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 <u>kwaters@com.edu</u> Counseling services are available on campus in the student center for free and students can also email <u>counseling@com.edu</u> to setup their appointment. Appointments are strongly encouraged.

**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 <u>www.com.edu/coronavirus</u>. In compliance with <u>Governor Abbott's May 18 Executive</u> <u>Order</u>, 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 <u>com.edu/coronavirus</u> for future updates.