

Course Number and Section: PTAC-2314-241IN Name of Course: Process Quality Course Semester: Spring 2022 Time and days of course: Internet

Instructor Information:

Jasline Randle

Email: jrandle5@com.edu

Virtual office hours: Tuesdays 5:30 pm to 7:30 pm via Microsoft Teams

Student hours and location: 100% Internet

Required Textbook/Materials: *Process Quality* by CAPT – Second Edition (ISBN: 0-13-700409-

5)

Materials Needed: Computer, internet access, Blackboard, Microsoft Office suite software, TEAMS, and paper/pencil

Course Description: PTAC 2314—Process Quality is one of the eight core courses in the Process Technology Alliance curriculum which is sponsored by the North American Process Technology Alliance (NAPTA, formerly GCPTA). The two-year program has been created to train students for careers as process technicians in the chemical and refining process industries.

This course will explore the history of Quality including Juran's, Crosby's, and Deming's theories, and the current applications in today's petrochemical industry. Internal and external customer/supplier relationships will be examined. Qualitative aspects of quality and the statistical methods which affect the quantitative aspects of measuring quality will be taught and used throughout the course. Students will be exposed to the benefits of continuous improvements and quality work as they pertain to developing a high-performance work team.

Students must have completed COSC 1301 and Math 1314 or TECM 1303 in order to take the PTAC course. Failure to have completed these courses prior to enrollment in this class will result in the student being dropped from the class.

Course requirements: As this is an online class, students must have the appropriate equipment and a reliable internet connection to complete the course. The COM IT department has indicated taking online exams on a phone, even when using the Blackboard app, is difficult and tricky at best and highly recommends taking online exams by computer.

Determination of Course Grade/Detailed Grading Formula:

Exams will primarily test the student's understanding of the chapters from the textbook "Process Quality" and chapter slides. All exams will be administered online with the amount of time allotted for a scheduled class period (170 minutes) to complete unless otherwise agreed to by the instructor.

A Safety Tip will be posted weekly. Each student will be assigned a week to provide the Safety Tip, starting Week 2. The class will post their responses.

Late Work, Make-Up, and Extra-Credit Policy:

Late Work Policy: No late assignments will be accepted. Assignments submitted late will not be graded or returned. Students will earn a grade of zero (0) on late assignments. All assignments should be submitted before the stated time and date, as instructed.

Make-Up Policy: The deadline for assignments may be extended provided arrangements are made and approved with your professor prior to the scheduled deadline.

Make-up Exams should be taken within two (2) calendar days of the original date. After two 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. Make-up Exams may score no higher than 90%. There will not be a make-up for the last Exam.

All other make-up assignments may be scored at 80% of the maximum and taken within two (2) calendar days of the original date.

Extra-Credit Policy: None

Return Work Policy: In most cases, assignments will be graded and returned within 14 business days of the due date.

Attendance Policy: None

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.

All email correspondence should make good use of the Subject line, with your name, course, and purpose on it [Subject: Doe, Jane Quality Homework 3]. If you attach a file to either Blackboard or e-mail, the file name should look something like this (use your own name and file name): [Doe_Jane_Homework3].

| Student Learner Outcome | Maps to Core Objective | Assessed via this Assignment |
|---|--|---------------------------------------|
| 1. Students will demonstrate knowledge of historical significance of events, key players, and foundational principles in the successful implementation of Process Quality in the Petrochemical Industry today. | 70% of students will answer the questions on this topic correctly | Exam and Homework |
| 2. Students will understand and apply foundational principles of statistics to complex problems to minimize nonconformance and unplanned events that adversely affect Process Quality in the Petrochemical Industry today. | 70% of students will answer the questions on this topic correctly | Exam and Homework |
| 3. Students will know and understand how to sustain continuous improvement through teamwork, management systems, and planning, and they will know the cost to quality and customers associated with taking no action and its effect on Process Quality in the Petrochemical Industry today. | 70% of students will answer the questions on this topic correctly. | Exam, Homework, and Class Projects |

| 4. | Students will know and understand how to sustain continuous improvement through teamwork, management systems, and planning, and they will know the cost to quality and customers associated with taking no action and its effect on Process Quality in the Petrochemical Industry today. | 70% of students will be assessed a minimum grade of C on their class project report. | Exam, Root Cause Analysis Project, and Final Project Report |
|----|--|--|---|
|----|--|--|---|

Academic Dishonesty: Any incident of academic policy will be dealt with in accordance with college policy and 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 disciplinary action. Academic dishonesty is also the copying of homework or class assignments, such as project reports. If copying is discovered, all students with copied work will be given a grade of zero for the specific assignment. If more than one instance of copying by a student is discovered, a grade of "F" for the course will be given to the student.

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, the Department Chair Industrial Careers, at 409-933-8607 or dlewis22@com.edu.

Course outline:

| Week | Tues | Topic: Edition 2 (Edition 1) | Assignment Due |
|------|------|---|---------------------------|
| #1 | 1/18 | Chapter 1 Introduction to Process Quality (Ch 1 | Discussion Board |
| | | Ed 1) | Homework Chapter 1 |
| | | | Safety Tip Week Selection |
| | | | Safety Tip |
| #2 | 1/25 | Chapter 2 Total Quality Management and | Homework Chapters 2 |
| | | Economics (Ch 15 Ed1) | Safety Tip |
| #3 | 2/1 | Chapter 3 Customer Service (Ch 9 Ed1) | Homework Chapters 3-4 |
| | | Chapter 4 Quality Management Systems— | Safety Tip |
| | | International Standards (ISO) (Ch 12 Ed1) | |
| #4 | 2/8 | Chapter 5 Quality Management—Quality | Homework Chapters 5-6 |
| | | Reliability Planning (Ch 13 Ed1) | Safety Tip |

| | | Chapter 6 Team Skills (Ch 11 Ed1) | |
|-----|------|--|--|
| #5 | 2/15 | | Exam 1: Chapters 1-6 Team Selection Safety Tip |
| #6 | 2/22 | Chapter 7 Continuous Improvements—Root Cause Analysis (RCA) and Corrective Action/Preventive Action (CPA) (Ch 8 Ed1) | Homework Chapter 7 Discussion Board Safety Tip |
| #7 | 3/1 | Chapter 8 Continuous Improvement—Six Sigma (Ch 10 Ed1) Chapter 9 Continuous Improvement—Lean (Ch 14 Ed1) | Homework Chapters 8-9 Safety Tip |
| #8 | 3/8 | | Exam 2: Chapters 7-9 Project Safety Tip |
| | 3/15 | COM Spring Break | |
| #9 | 3/22 | Chapter 10 Group Problem Solving—Designed Experiments (Ch 7 Ed1) | Homework Chapter 10 Project Safety Tip |
| #10 | 3/29 | Chapter 11 Other Basic Quality Tools (Ch 6 Ed1) Chapter 12 Data Collection and Representative Sampling (new) | Homework Chapters 11-12 Safety Tip |
| #11 | 4/5 | | Exam 3: Chapters 10-12 Safety Tip |
| #12 | 4/12 | Chapter 13 Variance and Operating Consistency (Ch 2 Ed1) Chapter 14 Variables Control Charts and Interpretation (Ch 4 Ed1) | Homework Chapter 13-14 Safety Tip |

| #13 | 4/19 | Chapter 15 Attributes Control Charts and | Homework Chapter 15 |
|-----|------|---|------------------------|
| | | Interpretation (Ch 5 Ed1) | Discussion |
| | | - | Safety Tip |
| #14 | 4/26 | Chapter 16 Process Capability (Ch 3 Ed1) | Homework Chapter 16-17 |
| | | Chapter 17 Putting the Puzzle Together (Ch 16 | Safety Tip |
| | | Ed1) | |
| #15 | 5/3 | | Exam 4: Chapters 13-17 |
| | | | Safety Tip |
| #16 | 5/10 | | Final Project |

^{**} Syllabus is subject to change at the discretion of the instructor(s). **

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 March 2. **The last date to withdraw from the 16-week session is April 25.** The last date to withdraw for the 2nd 8-week session is May 4.

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.

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.