



PTAC-2314-241CL
Process Quality
Fall 2021
Tuesday 6:00PM – 8:50PM
Room: TVB 1335

Instructor Information:

J. Randle

Email: jrandle5@com.edu

Office: 409-933-8580

Instructor Office Hours (Location):

Wednesday 5:30PM – 6:00PM (Technical Vocation Building #5, Room 1335)

Wednesday 8:50PM – 9:20PM (Technical Vocation Building #5, Room 1335)

Communicating with your instructor: ALL electronic communication with the instructor must be through your COM email (JRandle5@com.edu). Due to FERPA restrictions, faculty cannot share any information about performance in the class through other electronic means. Students may also contact the PTEC Administrative Office to leave a message for the instructor by contacting: Patricia England, Administrative Assistant, Phone: 409-933-8536.

All email correspondence should make good use of the Subject line, with your own name, course number and purpose on it [Subject: Doe, Jan – 2314 HW WK3]. 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_Jan_RCAproject].

Student Hours (Location):

Tuesday 6:00PM – 9:50PM (TVB 1335)

Required Textbook: *Process Quality* Second Edition by NAPTA (ISBN-13: 978-0-13-642470-3)

Materials Needed: All Microsoft software, TEAMS, and paper/pencil

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: 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.

Prerequisite: TSIA2 Math Diagnostic 4 or 5. Prerequisite: [PTAC 1302](#) with a grade of "C" or better. 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.

Student Learner Outcomes: Students successfully completing this course will demonstrate competency in the following Core Objectives. Competency will be demonstrated through exams, homework assignments, class participation, and the two team projects.

1. Reading: Ability to analyze & interpret a variety of language based & media materials such as: textbook material, PowerPoint slides, videos, and printed notes.
2. Writing: Competency is the ability to produce clear, correct, & coherent prose adapted to purpose, occasion & audience. This will be demonstrated through short-answer and essay questions and team projects.
3. Speaking: Competency is the ability to communicate orally in clear, coherent & persuasive language adapted to purpose. This will be demonstrated through project oral presentations.
4. Listening: At the college level is the ability to analyze & interpret various forms of auditory expression. This will be demonstrated through lecture, videos, and team presentations.
5. Critical Thinking: Embraces methods for applying qualitative skills analytically to subject matter in order to evaluate arguments & to construct alternate strategies. Creativity: Means novel product, activity or interaction demonstrating originality &/or flexibility. These will be demonstrated through exam questions and team projects.
6. Computer Literacy: is the ability to use & apply technology in communicating, problem solving, acquiring & processing information.
7. Mathematical Literacy: Ability to apply mathematical tools including technology to develop, solve, & interpret mathematical models.
8. Cultural Competence: Ability to develop & demonstrate awareness, knowledge, attitudes, & skills necessary to interact in a diverse & globally interdependent world.

Project Assignments: There will be two team projects assigned over the semester. A Root Cause Analysis project and a final project with a formal report are requirements for this course. Specific details regarding the projects will be provided by the instructor at the appropriate time. The Final Project Report must be submitted on its due date. Late submittals without prior approval may result in a grade of 0%.

Determination of Course Grade/Detailed Grading Formula:

Participation (homework):	15%
Root Cause Analysis Project:	15%
Exam Average:	50%
Final Class Project Score:	20%

Grading Scale:

90 – 100	= A
80 – 89	= B
70 – 79	= C
60 – 69	= D
0 – 59	= F

Students must receive a minimum grade of C to pass this course.

Exam 1:	Chapters 1-6
Exam 2:	Chapters 7-9
Exam 3:	Chapters 10-12
Exam 4:	Chapters 13-17

Exams will primarily test the student’s understanding of the chapters from the textbook “*Process Quality*” and **lecture slides**. The instructor may also include exam questions on lecture information and other material discussed in online lectures as these will be recorded for watching later.

Make-Up Policy:

- Make-up exams should be scheduled with your instructor BEFORE THE EXAM and should be taken within 2 business days of the original date. Make-up exams may score no higher than 90% for the first time only. Subsequent make-up exams will be no more than 75%. After 2 business 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. All make up exams will be completed in the testing center. There will not be a make up for the last Exam.
- Make up exams, class handouts and other works are the responsibility of the student and not that of the instructor.
- Make up quizzes will not be allowed. This will be strictly enforced.
- Make up homework will not be allowed. This will be strictly enforced.

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 as instructed.

Return Work Policy

In most cases, assignments will be graded and returned within 14 business days of submission.

Course Outline: 16 Week Course Calendar

We ek#	Tuesday Date	Topic	Assignments Due
1	8/25/2021	Introduction, Class Expectations, Chapter 1 Introduction to Process Quality (Ch 1 Ed 1)	
2	9/1/2021	Chapter 1	
3	9/8/2021	Chapter 2 Total Quality Management and Economics (Ch 15 Ed1)	
4	9/15/2021	Chapter 3 Customer Service (Ch 9 Ed1) Chapter 4 Quality Management Systems—International Standards (ISO) (Ch 12 Ed1)	
5	9/22/2021	Chapter 5 Quality Management—Quality Reliability Planning (Ch 13 Ed1) Chapter 6 Team Skills (Ch 11 Ed1)	
6	9/29/2021	Team Project Selection	Exam 1 Homework Chapters 1-6 DUE
7	10/6/2021	Chapter 7 Continuous Improvements—Root Cause Analysis (RCA) and Corrective Action/Preventive Action (CPA) (Ch 8 Ed1)	Root Cause Analysis
8	10/13/2021	Chapter 8 Continuous Improvement—Six Sigma (Ch 10 Ed1) Chapter 9 Continuous Improvement—Lean (Ch 14 Ed1)	
9	10/20/2021		Exam 2 Homework Chapters 7-9 DUE
10	10/27/2021	Chapter 10 Group Problem Solving—Designed Experiments (Ch 7 Ed1) Chapter 11 Other Basic Quality Tools (Ch 6 Ed1) Chapter 12 Data Collection and Representative Sampling (new)	
11	11/03/2021		Exam 3 Homework Chapters 10-12 DUE
12	11/10/2021	Chapter 13 Variance and Operating Consistency (Ch 2 Ed1) Chapter 14 Variables Control Charts and Interpretation (Ch 4 Ed1)	
13	11/17/2021	Chapter 15 Attributes Control Charts and Interpretation (Ch 5 Ed1) Chapter 16 Process Capability (Ch 3 Ed1)	

14	11/24/2021	Thanksgiving Holiday * COM is Closed	
15	12/1/2021	Chapter 17 Putting the Puzzle Together (Ch 16 Ed1)	Exam 4 Homework Chapters 13-17 DUE
16	12/8/2021		Team Project Presentation
	12/10/2021		Final Grades Submitted

****Schedule is subject to change at the discretion of the instructor(s). ****

Attendance Policy: Students are required to participate in all classroom discussions and assignments to be successful in this course. Students will be considered having an excused absence with 24 hours email notice to Instructor (immediate family or work-related emergencies only). If you find that you are going to miss a scheduled class for any reason, please **notify your professor via E-mail before the end time of your scheduled class**. In the case of a life related “sudden” emergency, email notice will be accepted before the next scheduled class.

Attendance is taken each class period and excessive missed classes will result in the instructor dropping you from the course (see Absence Chart below). Missed work/content is the responsibility of the student and making contact with fellow classmates is highly encouraged.

NOTE: Attendance will be reflected in your final grade. There will be a Participation grade given for attendance. Absences are excused only for emergencies and for prior arrangements that are made in writing to your instructor via E-Mail.

Absence Chart

Early Warning	2nd class day missed
PTAC Warning	3rd class day missed
Dropped by Instructor	4th class day missed

Tardiness / Early Release Policy: Attendance Sign-In Sheet will not be available 45 minutes after class begins. Students arriving to class more than 45 minutes late will be counted absent, at the discretion of the instructor. Also, leaving the class early (before being released by the Instructor) may result in an absence.

Classroom Environment:

- A seating chart will be implemented.
- The Team Project may require collaboration outside of class time.
- Blackboard will be used for some content and assignments.

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 for this class is November 19, 2021.**

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.

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.

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.

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. <http://www.com.edu/student-services/student-handbook.php>. 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 and may result in dismissal from this class.

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 PTEC Coordinator, at 409-933-8607 or dlewis22@com.edu.

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 Petro-chemical 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	70% of students will answer the questions on this topic correctly.	Exam and Homework

Quality in the Petro-chemical Industry today.		
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 Petro-chemical Industry today.	70% of students will answer the questions on this topic correctly.	Exam, Homework, and Class Projects
4. Students will know and understand the key principles for root cause analysis and corrective action by applying industry-common root cause methodologies and root cause analyses tools.	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

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 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 in the Student Success Center.

Counseling Statement: Any student that is needing counseling services is requested to please contact Kelly Waters at 409-933-8618 or kwaters@com.edu or Holly Bankston at 409-933-8520 hbankston@com.edu; both of whom are in the student success center. Counseling services are available on campus in the student center for free and students can also email counseling@com.edu to setup their appointment. Appointments are strongly encouraged; however, some concerns may be addressed on a walk-in basis.

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. Students are required to watch a training [video](#), complete the [self-screening](#), and acknowledge the safety guidance at: www.com.edu/selfscreen. In addition, students, faculty, and staff must perform a [self-screening](#) prior to each campus visit. Finally, students, faculty, or staff who have had symptoms of COVID-19, received a positive test for COVID-19, or have had close contact with an individual infected with COVID-19 must complete the [self-report tool](#).