



**Course Number and Section (PTAC-2346-222CL)**  
**Name of Course (Process Troubleshooting)**  
**Course Semester (Summer 2022)**

**Classroom: TVB - 1559**  
**Monday and Wednesday from 5:00 – 9:50 PM**

**Instructor: Dennis Link**  
[dlink@com.edu](mailto:dlink@com.edu)

**Mobile: 409-948-9538**

**Communicating with your instructor:** All electronic communication with the instructor must be through your COM email. Due to Family Educational Rights and Privacy Act (FERPA) restrictions, faculty cannot share any information about performance in the class through other electronic means.

**Student Hours and Location:** Available from 4:00 – 6:00 PM on Monday and Wednesday throughout semester. Also available by email, text or phone call as requested throughout semester.

**Required Textbook:**

Troubleshooting for Process Technicians

Author: Kukuk

ISBN: 2818560049296

**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:**

This course provides instruction in the different types of troubleshooting techniques, procedures, and methods used to solve process problems. Topics include application of data collection and analysis, cause-effect relationships, and reasoning. Students will explain steps in troubleshooting models; demonstrate use of troubleshooting tools; and apply troubleshooting techniques to process problems. Course syllabus, slide packs, homework assignments, quizzes and tests are available through content section of blackboard. Prerequisite: PTAC 2420

**Student Learner Outcomes:**

On successful completion of this course students will be able to:

1. Collect data and identify techniques for troubleshooting.
2. Utilize applicable troubleshooting methods to solve process problems.
3. Diagnose malfunction or abnormality associated with process problems.
4. Remedy equipment/process malfunction associated with plant problems.

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

1. Reading: Ability to analyze & interpret a variety of language based & media materials
2. Writing: Competency is the ability to produce clear, correct, & coherent prose adapted to purpose, occasion & audience
3. Speaking: Competency is the ability to communicate orally in clear, coherent & persuasive language adapted to purpose
4. Listening: At the college level is the ability to analyze & interpret various forms of auditory expression
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
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

Student Learner Outcome	Maps to Core Competencies	Assessed via this Assignment
Collect data and identify techniques for troubleshooting	Communication	Reading comprehension assessed via testing
Utilize applicable troubleshooting methods to solve process problems	Critical Thinking	Word Problems during class, on homework and on tests
Work in self-directed teams	Teamwork	Interacting with classmates during online meetings to troubleshoot and solve process problems

**Attendance Policy:**

It is difficult to learn all the concepts simply by reading the course textbook. Class participation during class discussions is not required, but strongly encouraged to help ensure your overall success with this course. Makeup work is the responsibility of the student and making contact with fellow classmates is highly encouraged to get details on missed assignments and class discussions.

**Withdrawal Policy:**

Students may withdraw from this course for any reason prior to the last 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 10 week class is August 5, 2022.

**Early Alert Program:** The Student Success Center at College of the Mainland has implemented an Early Warning 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 Warning 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.

**Student Concerns:** If you have any questions or concerns about any aspect of this course or if extenuating circumstances arise causing you to miss class, please contact instructor using the contact information previously provided. If, after discussing your concern with instructor, you continue to have questions, please contact Process Technology Department Chair, Derrick Lewis, at [dlewis22@com.edu](mailto:dlewis22@com.edu) or 409-933-8607.

**Course 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 online 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.

**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. 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](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](mailto:hbankston@com.edu). The Office of Services for Students with Disabilities is located in the Student Success Center. For Spring 2021, disability services may be offered virtually. <http://www.com.edu/student-services/counseling.php>

**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](mailto:kwaters@com.edu). Counseling services are available on campus in the student center for free and students can also email [counseling@com.edu](mailto:counseling@com.edu) to setup their appointment. Appointments are strongly encouraged; however, some concerns may be addressed through phone conversations.

**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 <https://www.com.edu/community-resource-center/>. 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 [deanofstudents@com.edu](mailto:deanofstudents@com.edu) or [communityresources@com.edu](mailto:communityresources@com.edu).

**Occupational License Eligibility; IMPORTANT:** Eligibility for an occupational license may be impacted by one's criminal history. Students with a criminal history should confer with faculty or the department chairperson. Students have a right to request a criminal history evaluation letter from the applicable licensing agency.

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

1. Each student will be assigned to lead one Safety-related discussion
2. A short quiz will be completed at the beginning of each chapter covering first one or two sections of the chapter.
3. All quizzes and tests will be completed in class with two hour window
4. Students will be assigned Simtronics Simulator Exercises applicable to each chapter of the textbook.
5. Each chapter test will include a required drawing that includes a process flow diagram of the applicable chapter process. The drawing component is worth 20% of each chapter test grade.

**Make-Up Policy:** No make-up quizzes or exams are allowed. A **grade of zero** will be given for any quiz or test not completed by the deadline unless special arrangements are made with instructor **BEFORE** scheduled due date of quiz or test.

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

Blackboard contains all quizzes, tests, grades, and course content materials.

**Grading Scale:**

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

**F<sub>N</sub> Grading:** The F<sub>N</sub> grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The F<sub>N</sub> 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<sub>N</sub> grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an F<sub>N</sub> grade

**Grading Components:**

Six Quizzes:	15% or 150 points
Five Tests:	75% or 750 points
Homework:	10% or 100 points
<b>Total:</b>	<b>100% or 1000 points</b>

**Homework Grade:** Homework is the key part of student's success in this course with each student starting the semester with 100 points. Students will lose 10 points of their homework grade each time they do not turn in a completed homework assignment by due date. If you miss class, you can send in homework assignments through my com email at [dlink@com.edu](mailto:dlink@com.edu) before midnight on due date.

**Success Tips for Students:**

1. Active, regular class participation strongly encouraged
2. Completion of all homework assignments, quizzes and tests prior to due date
3. Thorough review of applicable objectives, notes, slides, lessons and exercises prior to quizzes and tests

**Course outline 10 Week Calendar June 6 – August 10, 2022\***

<b>Week #</b>	<b>Dates</b>	<b>Topic</b>	<b>Assignments</b>	<b>Due Dates</b>
1	Week of June 6	Review course objectives, expectations and syllabus; Chapter 1 Basic Process Troubleshooting Fundamentals	Review Syllabus Read Chapter 1 Review Chapter 1 Slide Pack Chapter 1 Quiz	6/8
2	Week of June 13	Complete Chapter 1 Start Chapter 2 Decanter System	Lesson 1.2 Homework (HW1) Read Chapter 2 Review Chapter 2 Slide Pack Chapter 2 Quiz Lesson 2.2 HW2	6/13 6/15
3	Week of June 20	Complete Chapter 2 Decanter System	Exercises 2.2 and 2.3 HW3&4 Chapter 1&2 Test	6/20 6/22
4	Week of June 27	Start Chapter 3 Reactor System	Read Chapter 3 Review Chapter 3 Slide Pack Chapter 3 Quiz Lesson 3.2 HW5	6/27
5	Week of July 4	<b>No Class July 4</b> Complete Chapter 3 Reactor System	Exercise 3.2 HW6 Chapter 3 Test	7/6
6	Week of July 11	Chapter 4 Steam Generation System	Read Chapter 4 Review Chapter 4 Slide Pack Chapter 4 Quiz Lesson 4.2 HW7 Exercise 4.2 HW8 Chapter 4 Test	7/11  7/13
7	Week of July 18	Start Chapter 5 Distillation System	Read Chapter 5 Review Chapter 5 Slide Pack Chapter 5 Quiz Lesson 5.2 HW9 Distillation Worksheet HW10	7/18  7/20
8	Week of July 25	Complete Chapter 5 Distillation	Exercises 5.1 and 5.2 HW11&12 Chapter 5 Test	7/25 7/27
9	Week of August 1	Start Chapter 6 Absorption and Stripping System	Read Chapter 6 Review Chapter 6 Slide Pack Chapter 6 Quiz Lesson 6.2 HW13	8/1  8/3
10	Week of August 8	Complete Chapter 6 Absorption and Stripping System	Exercises 6.2 and 6.3 HW14&15 Chapter 6 Test	8/8 8/10

\*Schedule is subject to change at discretion of instructor