

## PTEC 1308 – 261CL SHE1 Safety, Health, and Environment 1 Fall 2022 Tuesday – 6:00 PM to 9:50 PM

| <b>Instructor Information:</b>                                       | : Jimm B. Cooper, CSP, BSc, LP (ret.), MI                        |  |  |
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|  | Office number: 409-933-8536                                      |  |  |
|  | E-Mail: jcooper4745@com.edu                                      |  |  |
|  | Office hours: 5:15 PM to 5:45 PM Tuesday                         |  |  |
|  | Office location: Industrial Careers Building #23 Faculty Offices |  |  |
| Student hours and location: Industrial Careers Building #23 Room 204 |  |  |  |
| Student nours and locati   | Tuesday 6:00 PM to 9:50 PM                                       |  |  |
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#### Required Textbook/Materials: Safety, Health, and Environment – 2<sup>nd</sup> Edition Prentice Hall – Publisher Center for the Advancement of Process Technology (CAPT)

**Course Description:** This course covers the development of knowledge and skills to reinforce the attitudes and behaviors required for safe and environmentally sound work habits. Emphasis is placed on safety, health, and environmental issues in the performance of all job tasks and regulatory compliance issues. Students will list components of a typical plant safety and environmental program; describe the role of a process technician in relation to safety, health, and environment; and identify and describe safety, health, and environmental equipment uses. Prerequisite: TSI Math 342 or equivalent developmental course with a grade of "C" or better.

#### **Course requirements:**

#### **Determination of Course Grade/Detailed Grading Formula:**

<u>Chapter quizzes</u> will be given for each chapter. These quizzes / HW are open book and the number of questions per chapter will vary. These quizzes are to be completed outside of class and through BrightSpace. You will have up to three (3) attempts for each chapter quiz. There are 24 quizzes, consisting of 370 total questions. (30% of grade)

<u>Section Examinations</u>: These exams are given after every four (4) chapters of the text. There are six (6) section exams worth 100 points each. The section examinations will be taken in class and are closed book. (40% of grade)

<u>Mid-term Examination</u>: The Midterm Exam will cover the first 12 chapters of the textbook. The will be 50 questions. Each question will be worth 2.50 points for a total maximum grade of 125 points. (8% of grade)

**Final Examination**: The final exam for this class is a comprehensive examination covering all 24 chapters. It will be 200 questions at one (1) point each. There will be approximately 5 to 10 questions from each chapter. The questions will be presented in a random order. (15% of grade)

<u>Safety Data Sheet Analysis</u>: A SDS Analysis of a topic selected by the student from list of topics provided in Blackboard under assignments. An example of a report is listed under this assignment's tab. The report is to be done in a business report format. <u>A cut and paste version</u> of the SDS will not be accepted. (6% of grade)

<u>Permitting Procedures Report</u>: A Permitting Procedures Report will be an assessment of an incident of the student's choice. The PPR will explain how the incident could have been avoided or have reduced consequences if the permitting process had been followed. (6% of grade)

**Discussion Board**: A discussion board will be available for students to earn extra points to make up for low Section Examination scores. The discussion board consists of five (5) questions that must be answered. This part is worth 25 points (5 points per answer). After completing the first part, a student must reply to other students' replies of the questions asked. Five (5) replies gain another 25 points.

Attendance, Lab exercises, and Safety Minute (ALSM) will be added at end of semester to point total. These points are additional points that will not exceed 50 points.

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

**Quizzes/Homework** is expected to be completed by the due date which will be the day before the next class. Quizzes and Homework will not be accepted after the due date. Once the Section Examination for the chapters has been given, those quizzes cannot be completed.

**Section Examinations** are expected to be made up at the next class meeting date. The make-up will be given after the day's class has ended, NOT before class or during break.

Attendance Policy: Each student will be required to register his/her attendance in the class by signing the class roster. This class includes lab time and the attendance sheets will be used to record lab points based on the day's activities.

**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. (Faculty may add additional statement requiring monitoring and communication expectations via Blackboard or other LMS).

| Student Learner Outcome | Maps to Core Objective       | Assessed via this Assignment  |
|-------------------------|------------------------------|-------------------------------|
| 1. SLO #1               | Textbook, outside reading    | Discussion by peers           |
| 2. SLO #2               | Photos, Videos               | Review by class               |
| 3. SLO #3               | Scenarios, Investigations    | Projects, Table top exercises |
| 4. SLO #4               | Scenarios, practice sessions | Projects, Table top Exercises |
| 5. SLO #5               | Review of OSHA Standards     | Projects, Table top Exercises |

Academic Dishonesty: The Section Examinations and Reports are designed to be completed by each student individually. Proven collaboration will result in disciplinary actions that could include dismissal from the program.

**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 Mr. Derrick Lewis, Program Director, <u>dlewis22@com.edu</u>. Please include your contact information in your email.

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

| Chapter Quiz / HW (24): 370 @ 1.30 points each | 480 points  |
|--|-------------|
| Section Examinations 6 @ 100 points each       | 600 points  |
| Safety Data Sheet Report 1 @ 100 points        | 100 points  |
| Permitting Procedures Report 1 @ 100 points    | 100 points  |
| Midterm Examination 1 @ 125 points             | 125 points  |
| Final Examination 1 @ 200 points               | 200 points  |
| TOTAL Points (exclusive of bonus points)       | 1605 points |
| Discussion Board (extra credit)                | 50 points   |
| Lab Exercises / Attendance                     | 50 points   |
|  |             |
| Grading criteria:                              |             |
| 1605  to  1444 = A                             |             |
| 1443 to $1284 = B$                             |             |
| 1283 to $1123 = C$                             |             |
| 1122 to $963 = D$                              |             |
| 962 to $000 = F$                               |             |
|  |             |

Course outline: (include calendar with lecture topics, due dates)

| Week# | Dates              | Reading Assignments   | Quiz & Exam Due Dates   |
|-------|--------------------|---|---|
| 1     | Tuesday<br>Aug 23  | Chapter 1 Introduction to Safety, Health, &<br>Environment<br>Chapter 2 Types of Hazards and Their<br>Effects                   | Quiz 1 due 09/05<br>Quiz 2 due 09/05                                    |
| 2     | Tuesday<br>Aug 30  | <b>Discussion Board (PSM) opens</b><br>Chapter 3 Recognizing Chemical<br>Hazards<br>Chapter 4 Recognizing Biological<br>Hazards | Quiz 3 due 09/05<br>Quiz 4 due 09/05<br><u>Prepare for SE1</u>          |
| 3     | Tuesday<br>Sept 6  | Section Examination One<br>Chapter 5 Equipment and Energy<br>Hazards<br>Chapter 6 Fire and Explosion Hazards                    | Quiz 5 due 09/19<br>Quiz 6 due 09/19<br>Discussion Board opens 09/06    |
| 4     | Tuesday<br>Sept 13 | Chapter 7 Pressure, Radiation &<br>Temperature Hazards<br>Chapter 8 Hazardous Atmospheres and<br>Respiratory Hazards            | Quiz 7 due 09/19<br>Quiz 8 due 09/19<br><u><b>Prepare for SE2</b></u>   |
| 5     | Tuesday<br>Sept 20 | Section Examination Two<br>Chapter 9 Working Area and Height<br>Hazards<br>Chapter 10 Hearing and Noise Hazards                 | Quiz 9 due 10/03<br>Quiz 10 due 10/03<br>Safety Data Sheet Report       |
| 6     | Tuesday<br>Sept 27 | Chapter 11 Construction, Maintenance,<br>and Tool Hazards<br>Chapter 12 Vehicle and Transportation<br>Hazards                   | Quiz 11 due 10/03<br>Quiz 12 due 10/03<br><u>Prepare for SE3</u>        |
| 7     | Tuesday<br>Oct 04  | <i>Section Examination Three</i><br>Safety Data Sheet Analysis Due<br>Mid-term Examination review                               | Study for Midterm Examination   |
| 8     | Tuesday<br>Oct 11  | Mid-Term Examination  | Read chapters 13 & 14   |
| 9     | Tuesday<br>Oct 18  | Chapter 13 Natural Disasters and<br>Inclement Weather<br>Chapter 14 Physical Security and<br>Cyber Security                     | Quiz 13 due 10/31<br>Quiz 14 due 10/31                                  |
| 10    | Tuesday<br>Oct 25  | Chapter 15 Recognizing Ergonomic<br>Hazards<br>Chapter 16 Recognizing Environmental<br>Hazards                                  | Quiz 15 due 10/31<br>Quiz 16 due 10/31<br><u><b>Prepare for SE4</b></u> |

| 11 | Tuesday<br>Nov 01 | Section Examination Four<br>Chapter 17 Introduction to Hazard<br>Controls<br>Chapter 18 Engineering Controls:<br>Alarms and Indicator Systems          | Quiz 17 due 11/14<br>Quiz 18 due 11/14                                  |
|----|-------------------|--|---|
| 12 | Tuesday<br>Nov 08 | Chapter 19 Engineering Controls:<br>Process Containment and Process<br>Upset Controls<br>Chapter 20 Administrative Controls:<br>Programs and Practices | Quiz 19 due 11/14<br>Quiz 20 due 11/14<br><u><b>Prepare for SE5</b></u> |
| 13 | Tuesday<br>Nov 15 | Section Examination Five<br>Chapter 21 Permitting Systems<br>Chapter 22 Personal Protective<br>Equipment and First Aid                                 | Quiz 21 due 11/28<br>Quiz 22 due 11/28<br>Permitting Procedure Paper    |
| 14 | Tuesday<br>Nov 22 | Chapter 23 Monitoring Equipment<br>Chapter 24 Fire, Rescue, & Emergency<br>Response Equipment  | Quiz 23 due 11/28<br>Quiz 24 due 11/28                                  |
| 15 | Tuesday<br>Nov 29 | <i>Section Examination Six</i><br><b>Permitting Procedure Report Due</b><br>Final Exam Review  | Discussion Board Closes 12/02   |
| 16 | Tuesday<br>Dec 06 | Final Examination  | Merry Christmas<br>Happy New Year                                       |

# THE SCHEDULE IS SUBJECT TO CHANGE DEPENDING ON DIRECTIVES FROM COM'S ADMINISTRATION.

### **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.<<u>https://build.com.edu/uploads/sitecontent/files/student-services/Student\_Handbook\_2019-2020v5.pdf</u>. *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.* <u>https://build.com.edu/uploads/sitecontent/files/student-services/Student\_Handbook\_2019-2020v5.pdf</u>.

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 Michelle Brezina at 409-933-8124 or <u>mvaldes1@com.edu</u>. The Office of Services for Students with Disabilities is located in the Student Success Center.

**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 16-week session is November 18.

**F**<sub>N</sub> **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.

#### **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 or communityresources@com.edu