



**OSHT 2305 001CL
ERGONOMICS/HUMAN FACTORS IN SAFETY
FALL 2021
TUESDAYS 6:00 PM – 8:50 PM**

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Student/Office hours and location:

Office Hours:

Monday – 3:00 PM to 5:30 PM

Tuesday's & Wednesday's - 3:00 PM to 5:30 PM

Instructor will be available during scheduled student hours. All student (office) hours will be conducted via phone or in-person. Other times will be available by appointment. Please email the instructor to set up other times.

Required Textbook:

Course Description: This course provides an in-depth study of the relationship of human behavior and ergonomics as applied to workplace safety.

Upon successful completion of OSHT 2405, the student should be able to:

1. Recognize the human psychological and physiological factors as they effect the safety and health in the workplace.
2. Discuss regulatory issues of ergonomics including the history of the OSHA proposed ergonomic standard.
3. Evaluate program organization concepts related to an industrial ergonomics injury prevention and control -program.

4. Design and implement an ergonomics control program.
5. Examine layouts, adjustable designs, and clearance dimensions, controls and tools considered in an optimal-occupational workplace design.
6. Discuss responsibility of the manager in developing an ergonomic plan that will meet regulatory demands and the challenges of competing financial limitations for ergonomic programs .

Course requirements:

Examinations: There will be one final examination over the material covered. The final exam will be closed book. Exam must be taken at the designated time unless prior arrangements have been made with the professor. Students who have an unexcused absence will not be allowed to make up an exam and receive the grade of “0” (zero).

Project Report: Each student is required to write one subject report and present the report to the class. Topics and specific instructions for the report will be provided by the instructor. Students are expected to present their papers on the date the assignment is due. **If they are turned in late, the student will receive a 50% reduction in points.** Papers and reports will not be accepted more than one (1) week late and result in a grade of “0” (zero).

Homework: There will be two (2) homework assignments. Each homework assignment has a maximum of 50-points each. The homework will address core objective critical thinking. Failure to turn in a required homework at the prescribed time will result in zero “0” points awarded for the assignment. If you cannot make the class, you must email the homework to your professor, at the email address provided here, prior to the beginning of the class time on the date it is due

Quizzes: There will be five quizzes, which will be over the materials covered in the previous weeks. The quizzes will be closed book.

Determination of Course Grade/Detailed Grading Formula

Grading Scale:

90 – 100% = A
80 – 89% = B
70 – 79% = C
60 – 69% = D
Below 60% = F

Grading Distribution:

1. Final Examination 100 points

2. Industrial Project Report	100 points
3. Homework's (2 Homework's @ 50-points each)	100 points
4. Quizzes 5 (5 quizzes @ 20 points each)	100 points
5. Class Participation (14 @ 5 points each)	70 points

TOTAL

470 points

Late Work, Make-Up, and Extra-Credit Policy: Tests and quizzes must be taken **on the time and date noted unless prior arrangements are made with the instructor.** All approved make-up tests must be taken at the Testing Center located at Student Center Building 1. It will be the responsibility of students to arrange with the Testing Center for the test. Testing Center can be reached at testingcenter@com.edu or 409-933-8676. **Final examination must be taken at the designated time.**

Attendance Policy: Students at the College of the Mainland are expected to punctually attend every session of all classes for which they are registered. You will be required to sign in at each class. If you are absent, you will still be held responsible for the materials that were covered in the class. You will be dropped from this class if you are absent from class four (4) times. If you must be absent, please contact the instructor.

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
SLO 1	Critical Thinking	Homework1
SLO 2	Teamwork	Homework 2
SLO 3	Critical Thinking	Group work
SLO 4	Critical Thinking	Quizzes
SLO 5	Communication Skills	Project Presentation

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 discipline action.

Students 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 or concerns please contact Derrick Lewis, Department Chair at 409-933-8607 or email dlewis22@com.edu.

Course Outline

16 Week Course Calendar

#	Date	Topic (Chapter Number)	Reading and Assignment Due
1	8/24	Introduction, Run, Hide, and Fight. What is Ergonomics?	Read Chapter 1 & 2
2	8/31	Body as Mechanical system.	Read Chapter 3.
3	9/7	Anthropometry, workstation. Quiz 1	Read Chapter 4.
4	9/14	Standing and sitting at work. Homework I assigned	Read Chapter 5.
5	9/21	Repetitive Task Muscular Work, Quiz 2	Read Chapter 6.
6	9/28	Manual Handling and load carriage.	Read Chapters 7
7	10/5	Work capacity, stress, fatigue. Quiz 3	Read chapter 8. Homework 1
8	10/12	Job demands, health and well-being.	Read Chapter 9.
9	10/19	Working environment, hot and cold. Homework 2 assigned	Read Chapter 10.
10	10/26	Visual environment. Quiz 4.	Read chapter 11.
11	11/2	Hearing, sound, noise. Class Project Assigned	Read Chapter 12.
12	11/9	Mind at work. Quiz 5	Read Chapters 13 & 14. Homework 2 Due 4/11/21
13	11/16	Displays and control, interactive devices.	Read Chapter 15.
14	11/23	Accident investigation and safety management. Work on Project Report.	Review your project report
15	11/30	Submit Project Report. Final Exam Review	Project Report Due Course Evaluation
16	12/7	Final Exam & Course Evaluation	Course Evaluation

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 October 6. The last date to withdraw from the 16-week session is November 19. The last date to withdraw for the 2nd 8-week session is December 2.

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.