



**EPCT 1341 201 C3
PRINCIPLES OF INDUSTRIAL HYGIENE
SPRING 2025
6:00 PM – 8:50 PM WEDNESDAYS**

Instructor: Dr. George Njoku
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OSHT Department Administrative Assistant:
Patricia England
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Student/Office hours and location:

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

Other times will be available by appointment only.

Required Textbook/Materials:

Fundamentals of Industrial Hygiene – Seventh Edition
Author: Jill Niland, MPH, CIH, CSP
Publisher: National Safety Council (NSC)
ISBN# - 9780879123567

Course Description:

Concepts in threshold limits, dose response, and general recognition of occupational hazards, including sampling statistics, calibration, and equipment use. A study of the control of occupational hazards and sample collection and evaluation methods.

Upon successful completion of this course, students will:

1. Explain the terminology and discuss concepts of industrial hygiene and toxicology.
2. Describe the anatomy and functions of the routes of entry, explain the major body systems.
3. Identify major health hazards found in the workplace and discuss their effects.
4. Apply threshold limit values and other appropriate workplace exposure standards.
5. Prepare a report based on research and investigation of an area of industrial hygiene.

Student Learner Outcome

Student Learner Outcome	Maps to Core Objective	Assessed via this Assignment
1.	Empirical & Quantitative Skills	Homework 1
2.	Critical Thinking	Homework 1
3.	Critical Thinking	Homework 1
4.	Critical Thinking	Quizzes
5.	Empirical and Quantitative Skills	Quizzes & Final Exam

Course requirements:

Examinations: There will be one final exam, which will be over the material covered in the previous fifteen weeks. 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 are absent and have not made prior arrangements will not be allowed to make up an exam and will receive the grade of “0” (zero).

Project Report: Each student is required to write one project 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 submit their papers on the date the assignment is due. **If they are turned in late, the student will receive zero (0) points unless prior arrangements are made with the instructor.**

Homework: Two (2) homework assignments will be given. Each homework assignment has a maximum of 50 points each. 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 four 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:

Four Quizzes (50 points each quiz)	200 points
Industrial Project Report	100 points
Homework's (2 Homework's @ 50-points each)	100 points
Final Exam	100 points
Course Participation (14 at 5 points each)	70 points
Syllabi Quiz	5 points

TOTAL

570 points

Attendance Policy: Students at the College of the Mainland are expected to participate in every learning activity assigned. Participation in each learning event (Discussion board, homework assignments, etc.) constitutes class attendance. Each student is expected to log into the online class at least twice a week to make sure each week's lesson is fully comprehended or check Instructor communication.

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 D2L or other LMS).

Academic Dishonesty: "Academic dishonesty" shall include, but not be limited to, cheating, plagiarism, and collusion. "Collusion" shall be defined as the unauthorized collaboration with another person in preparing written work for fulfillment of course requirements. Per COM Policy FLB (Local) "Student Conduct: Student Rights and Responsibilities".

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

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://www.com.edu/student-services/docs/Student Handbook 2024-2025 v2.pdf](https://www.com.edu/student-services/docs/Student_Handbook_2024-2025_v2.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.*

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:

Kimberly Lachney, Student Accessibility Services Coordinator

Phone: 409-933-8919

Email: AccessibilityServices@com.edu

Location: COM Doyle Family Administration Building, 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 1st 8-week session is February 26. The last date to withdraw from the 16-week session is April 21. The last date to withdraw for the 2nd 8-week session is April 30.

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. The last date of attendance should be documented for submission of an FN 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.

Nondiscrimination Statement:

The College District prohibits discrimination, including harassment, against any individual on the basis of race, color, religion, national origin, age, veteran status, disability, sex, sexual orientation, gender (including gender identity and gender expression), or any other basis prohibited by law. Retaliation against anyone involved in the complaint process is a violation of College District policy.

Course outline: 16 Week Course Calendar

#	Day	Date	Topic	Assignment
1	W	1/15	Introduction & Syllabus. Course Introduction. Brief history of IH and background. The Lungs.	Chapter 3
2	W	1/22	The Skin and & Occupational Dermatoses. Thermal Stress and Evaluation of Hot and Cold Environment.	Chapters 4
3	W	1/29	The Human Ears	Chapters 5
4	W	2/5	The Human Eyes Homework 1 Assigned	Chapters 6 & 14
5	W	2/12	Toxicology and Occupational Exposure; Biological Hazards. Quiz 1	Chapter 7
6	W	2/19	Toxicology and Occupational Exposure; Biological Hazards Gases, Vapors, Solvents	Chapters 8 & 9
7	W	2/26	Evaluation of Hazards and Exposure Assessment. Air Sampling and Direct reading instruments. Dusts/Fibers/Particulate Measurement.	Chapters 15, 16, 17
8	W	3/5	Quiz 2 Final Project Assignment	Chapter 10 Homework 1 Due
	W	3/12	Radiation: Ionization SPRING BREAK NO CLASS	Chapter 10
9	W	3/19	SPRING BREAK NO CLASS	Chapter 11
10	W	3/26	Non-Ionization, Measurements and Calculations	Chapters 18, & 19
11	W	4/2	Quiz 3. Homework 2 Assigned	Chapters 20 & 21
12	W	4/9	Hazard Control Methods. Local Exhaust Ventilation Systems Dilution and General Ventilation	Chapters 22
13	W	4/16	Respiratory Protection. Personal Protective Equipment	Chapter 23
14	W	4/23	Quiz 4	Homework 2 Due
15	W	4/30	Project Report/ Presentations.	Final Project Report Due Course Evaluation
16	W	5/7	Final Exam	Course Evaluation

The syllabus is subject to change at the discretion of the instructor.