

Industrial Hygiene Applications (EPCT 2331)

CREDIT

3 Semester Credit Hours (lecture)

MODE OF INSTRUCTION

Face to Face. Tuesday 5.30pm – 8.20pm

PREREQUISITE/CO-REQUISITE:

Prerequisite EPCT 1341 Principles of Industrial Hygiene

COURSE DESCRIPTION

A study of the industrial environment as it relates to worker's health. This course provides training in anticipation, recognition, evaluation, and controlling health hazards – particularly chemical, physical, biological, and ergonomic factors existing in the workplace and having injurious effects on workers. The course also introduces training in instrumentation used in monitoring and measuring health hazards in the workplace and covers current issues in industrial hygiene.

COURSE OBJECTIVES

Upon completion of this course the student will be able to:

1. Identify the impact of hazards on workers.
2. Interpret and apply regulations in a business environment.
3. Gather, manage, and analyze data.
4. Apply professional standards.
5. Prepare reports on various areas of industrial hygiene based on student investigations.

INSTRUCTOR CONTACT INFORMATION

Instructor: **Dr. Greg Klaus**

Email: klausgreg@hotmail.com

Phone: 409 880 8321

Office Location: MPC 109

Office Hours: **Tuesday 5.00pm (Appointment Recommended).**

REQUIRED TEXTBOOK AND MATERIALS

1. Fundamental of Industrial Hygiene by Barbara A. Plog and Patricia Quinlan, 6th edition.
2. USB Flash drive

Approved: [GSK/1/16/23](#)



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ATTENDANCE POLICY

Attendance is required for all scheduled lectures and activities. Attendance and participation account for 10% of the class grade (as shown in course evaluation). An excused absence will only be granted if the student provides a written justification (for example, by email) which is vetted and approved by the instructor (such as a sickness/injury, or job related requirement).

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

COURSE CALENDAR

DATE	TOPIC	READINGS (Due on this Date)	ASSIGNMENTS (Due on this Date)
Week 1 – January 17	Course Objectives, Syllabus, Policies and Expectations	Chapter 15	
Week 2 – January 24	Air Sampling	Chapter 16	
Week 3 – January 31	Direct Reading Instruments for Gases, Vapors, and Particulates	Chapter 17	
Week 4 - February 7	Methods of Control	Chapter 18	
Week 5 - February 14	EXAM 1		<u>Exam 1</u>
Week 6 – February 21	Local Exhaust Ventilation	Chapter 19	
Week 7 – February 28	Dilution Ventilation of Industrial Workplaces	Chapter 20	
Week 8 – March 7	General Ventilation of Non- Industrial Occupancies	Chapter 21	
Week 9 – March 14	SPRING BREAK (NO CLASSES)		
Week 10 – March 21	Chapter 22 Respiratory Protection	Chapter 22	<u>Outline of Proposal</u> for Class Presentation to be submitted in writing on 3/28/23
Week 11 – March 28	Personal Protective Equipment	Chapter 23	Class Presentation Proposal Due
Week 12 – April 4	EXAM 2		<u>Exam 2</u>

Week 13 – April 11	The Industrial Hygienist and The Safety Professional Managing Diversity, & Career Challenges	Chapter 24 Chapter 25	
Week 14 – April 18	The Occupational Medical Physician and The Occupational Nurse	Chapter 26 Chapter 27	
Week 15 – April 25	Class Presentations of Selected Topic. Environmental Health and Safety, and IH Programs	Chapter 28 Chapter 29	Class Presentations of Selected Topic commence
Week 16 – May 2	Government Regulations and International Developments	Chapter 30 Chapter 31	Class Presentations of Selected Topic continue to finish
Week 17 – May 9	FINAL EXAM		<u>Comprehensive Final Exam</u>

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

1. Class Attendance and Participation = **10%**
2. Exam 1 = **25%**
3. Exam 2 = **25%**
4. Class Safety Presentation = **10%**
5. Final Exam = **30%**

GRADE SCALE

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

TECHNICAL REQUIREMENTS

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at <https://lit.edu/online-learning/online-learning-minimum-computer-requirements>. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with

disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at [Special Populations - Lamar Institute of Technology \(lit.edu\)](#).

STUDENT CODE OF CONDUCT STATEMENT

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at www.lit.edu. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

STARFISH

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.