

## Principles of Industrial Hygiene (EPCT 1341)

### CREDIT

3 Semester Credit Hours (lecture)

### MODE OF INSTRUCTION

Face to Face. Thursday 5:30pm – 8:00pm

### PREREQUISITE/CO-REQUISITE:

Passed the writing portion of TSI or other accepted testing instrument.

### COURSE DESCRIPTION

Explain terminology and discuss concepts of industrial hygiene and toxicology; describe the anatomy and function of the routes of entry; explain the of the major body systems; identify major health hazards found in the workplace and discuss their effects; apply threshold limit values and other appropriate workplace exposure standards; and prepare a report based on research and investigation of an area of industrial hygiene.

### COURSE OBJECTIVES

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

### INSTRUCTOR CONTACT INFORMATION

Instructor: **Rueben Reyes, Certified Safety Professional**

Email: [rreyes@lit.edu](mailto:rreyes@lit.edu)

Office Phone: 409 284 7497

Office Location: Multi-Purpose Center (MPC) Room 109

Office Hours: **Thursday 5:00-5:30pm.**  
**(Appointment Recommended).**

### REQUIRED TEXTBOOK AND MATERIALS

1. Fundamentals of Industrial Hygiene by Barbara A. Plog & Patricia J. Quinlan, 7th edition, NSC Press Publisher
  - a. ISBN number is 978-0-87912-356-7
2. USB Flash drive

Approved: [RPW/1/17/24](#)



**LAMAR INSTITUTE  
OF TECHNOLOGY**

## ATTENDANCE POLICY

This is an attendance-based class. Attendance is required for all scheduled lectures and activities. Attendance and participation account for 10% of the overall class grade (as shown in the course evaluation). 3% points will be deducted from your overall grade (up to a maximum of 10%) for each unexcused absence.

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). If the student is applying for a job-related excused absence documentation must be provided from their employer, including their supervisor's contact information. A sick note from a Doctor or hospital is required for long term sickness/injury.

## 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)
<b>Week 1</b> <b>1/23/25</b>	<b>Monday – MLK Day - Campus Closed</b> <b>Thursday - Introduction of faculty/students, syllabus, and policies/ course introduction/expectations/Outline of Class Presentations of Selected Topic/Chapter 1 Overview of Industrial Hygiene</b>	<b>Week 1</b> <b>PowerPoint</b>	<b>Introduction</b> <b>Discussion due</b> <b>1/22/25</b>
<b>Week 2</b> <b>1/27/25</b>	<b>Chapter 2 The Lungs</b>	<b>Week 2</b> <b>PowerPoint</b>	
<b>Week 3</b> <b>2/3/25</b>	<b>Chapter 3 The Skin and Occupational Dermatoses</b>	<b>Week 3</b> <b>PowerPoint</b>	
<b>Week 4</b> <b>2/10/25</b>	<b>Chapter 4 The Ears</b>	<b>Week 4</b> <b>PowerPoint</b>	
<b>Week 5</b> <b>2/17/25</b>	<b>Chapter 5 The Eyes</b>	<b>Week 5</b> <b>PowerPoint</b>	<b>Review of Chapters 1-5 for Exam 1</b> <b>Discussion 1 due</b> <b>2/20/25</b>

<b>Week 6</b> <b>2/24/25</b>	<b>Exam 1 (Chapters 1-5)</b>		<b><u>Exam 1</u></b> <b><u>2/27/25</u></b>
<b>Week 7</b> <b>3/3/25</b>	<b>Chapter 6 Industrial Toxicology</b>	<b>Week 7</b> <b>PowerPoint</b>	
<b>Week 8</b> <b>3/10/25</b>	<b>SPRING BREAK</b> <b>(NO CLASSES)</b>		
<b>Week 9</b> <b>3/17/25</b>	<b>Chapter 7 Gases, Vapors, and Solvents</b>	<b>Week 8</b> <b>PowerPoint</b>	<b>Discussion 2 due</b> <b>3/23/25</b>
<b>Week 10</b> <b>3/24/25</b>	<b>Chapter 8 Particulates</b>	<b>Week 10</b> <b>PowerPoint</b>	<b><u>Outline of Proposal</u></b> for Class Presentation to be submitted in writing on Thursday, 3/27/25
<b>Week 11</b> <b>3/31/25</b>	<b>Chapter 9 Industrial Noise</b>	<b>Week 11</b> <b>PowerPoint</b>	<b>Review of Chapters 1-5 for <u>Exam 2</u></b> <b>Class Presentations of Selected Topic</b>
<b>Week 12</b> <b>4/7/25</b>	<b>Exam 2 (Chapters 6-9)</b>		<b><u>Exam 2</u></b> <b><u>4/10/25</u></b>
<b>Week 13</b> <b>4/14/25</b>	<b>Chapter 10 Ionizing Radiation and Chapter 11 Nonionizing Radiation</b>	<b>Week 13</b> <b>PowerPoint</b>	<b>Class Presentations of Selected Topic</b> <b>Discussion 3 due</b> <b>4/17/25</b>
<b>Week 14</b> <b>4/21/25</b>	<b>Chapter 12 Thermal Stress</b>	<b>Week 14</b> <b>PowerPoint</b>	<b>Class Presentations of Selected Topic</b>
<b>Week 15</b> <b>4/28/25</b>	<b><u>Final Day</u> for Class Presentations of Selected Topic.</b> <b>Chapter 13 Ergonomics and Chapter 14 Biological Hazards</b>	<b>Week 15</b> <b>PowerPoint</b>	<b>Class Presentations of Selected Topic.</b>  <b>Review of Chapters 1-14 for Comprehensive Final Exam</b>

<b>Week 16</b> <b>5/1/25</b>	<b>Comprehensive Final Exam</b> <b>(Chapters 1-14)</b>		<b><u>Final Exam</u></b> <b><u>5/1/25</u></b>
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### **COURSE EVALUATION**

Final grades will be calculated according to the following criteria:

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|--|-----|
| 1. Class Attendance/Participation/Discussions      | 10% |
| 2. Two Class Tests (2 x 25%)                       | 50% |
| 3. Class Presentation of Selected Topic/Instrument | 10% |
| 4. 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.

### **ARTIFICIAL INTELLIGENCE STATEMENT**

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare students for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI/ChatGPT in their courses.

### **ACADEMIC DISHONESTY**

Students found to be committing academic dishonesty (cheating, plagiarism, or collusion) may receive disciplinary action. Students need to familiarize themselves with the institution's Academic Dishonesty Policy available in the Student Catalog & Handbook at <http://catalog.lit.edu/content.php?catoid=3&navoid=80#academic-dishonesty>.

## **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](mailto:specialpopulations@lit.edu). You may also visit the online resource at [Special Populations - Lamar Institute of Technology \(lit.edu\)](https://www.lit.edu/specialpopulations).

## **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](http://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.

## **Course Requirements and Policies**

1. All exams are worth 100 points. All exam questions are included in lecture materials and discussed in class.
2. In the event of an emergency and you are absent on test night, it is your responsibility to contact the instructor and schedule a makeup test as soon as possible.
3. Final grades are non-negotiable. No extra credit will be awarded.
4. Cheating on an exam is a violation of LIT Policy and will result in an "F" on your test. Please review the "Code of Conduct & Disciplinary Policy" and "Academic Dishonesty" in the LIT Student Handbook.
5. It is your responsibility to sign the attendance roster. No one else may sign the roll on your behalf. Please notify your Occupational Health and Safety Advisor if you will be absent for an extended period due to a work-related circumstance, or a medical quarantine or emergency, that prevents you from attending class. Your Occupational Safety and Health Advisor will authorize excused absences.

6. You are expected to be in class at class time. If you do find yourself in the position of arriving late due to unavoidable circumstances, please remember to sign the attendance roster when you arrive. Some lectures are short in length and coming in late may result in an absence.
  7. You are required to stay the entire length of each lecture class unless dismissed, as a class, by the instructor.
8. **Drop/Add/Withdraw – *It is the student's responsibility to make sure you are officially enrolled or dropped from this course.*** If at any point you decide to drop a class, it is your responsibility to officially drop (i.e., using proper administrative offices/paperwork.) Any student who stops attending class and does not officially drop the course will be given an “F” as the semester grade.
8. Cell phones, headphones and any other electronic communication devices ***will always be turned off*** in class .
  9. Campus policy dictates there is to be no eating , drinking or tobacco products in the classroom.
  10. Please do not bring children to class.