

## Principles of Industrial Hygiene (EPCT 1341)

### CREDIT

3 Semester Credit Hours (lecture)

### MODE OF INSTRUCTION

Face to Face. Thursday 5:30pm – 8:20pm

### 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: **Peggy Williams, Certified Safety Professional**

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

Office Phone: 409 201 5124

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, 6th edition, NSC Press Publisher
  - a. ISBN number is 978-0-87912-312-3
2. USB Flash drive

Approved: [RPW/1/11/23](#)



**LAMAR INSTITUTE  
OF TECHNOLOGY**

### 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)
<b>Week 1</b> <b>1/19/23</b>	Monday – MLK Day - Campus Closed Thursday - Introduction of faculty/students, syllabus, and policies/ course introduction/expectations/Outline of Class Presentations of Selected Topic/Chapter 1 Overview of Industrial Hygiene	Week 1 PowerPoint	
<b>Week 2</b> <b>1/26/23</b>	Chapter 2 The Lungs	Week 2 PowerPoint	
<b>Week 3</b> <b>2/2/23</b>	Chapter 3 The Skin and Occupational Dermatoses	Week 3 PowerPoint	
<b>Week 4</b> <b>2/9/23</b>	Chapter 4 The Ears	Week 4 PowerPoint	
<b>Week 5</b> <b>2/16/23</b>	Chapter 5 The Eyes	Week 5 PowerPoint	Review of Chapters 1-5 for Exam 1
<b>Week 6</b> <b>2/23/23</b>	Exam 1		<u>Exam 1</u>
<b>Week 7</b> <b>3/2/23</b>	Chapter 6 Industrial Toxicology	Week 7 PowerPoint	

<b>Week 8</b> <b>3/9/23</b>	<b>Chapter 7 Gases, Vapors, and Solvents</b>	<b>Week 8 PowerPoint</b>	
<b>Week 9</b> <b>3/16/23</b>	<b>SPRING BREAK (NO CLASSES)</b>		
<b>Week 10</b> <b>3/23/23</b>	<b>Chapter 8 Particulates</b>	<b>Week 10 PowerPoint</b>	<b><u>Outline of Proposal</u> for Class Presentation to be submitted in writing on Thursday, 3/23/23</b>
<b>Week 11</b> <b>3/30/23</b>	<b>Chapter 9 Industrial Noise</b>	<b>Week 11 PowerPoint</b>	<b>Review of Chapters 1-5 for <u>Exam 2</u> Class Presentations of Selected Topic</b>
<b>Week 12</b> <b>4/6/23</b>	<b>Exam 2</b>		<b><u>Exam 2</u></b>
<b>Week 13</b> <b>4/13/23</b>	<b>Chapter 10 Ionizing Radiation and Chapter 11 Nonionizing Radiation</b>	<b>Week 13 PowerPoint</b>	<b>Class Presentations of Selected Topic</b>
<b>Week 14</b> <b>4/20/23</b>	<b>Chapter 12 Thermal Stress</b>	<b>Week 14 PowerPoint</b>	<b>Class Presentations of Selected Topic</b>
<b>Week 15</b> <b>4/27/23</b>	<b><u>Conclusion</u> of Class Presentations of Selected Topic. Chapter 13 Ergonomics and Chapter 14 Biological Hazards</b>	<b>Week 15 PowerPoint</b>	<b>Class Presentations of Selected Topic.  Review of Chapters 1-14 for Comprehensive Final Exam</b>
<b>Week 16</b> <b>5/4/23</b>	<b>Comprehensive Final Exam</b>		<b><u>Final Exam</u></b>

### **COURSE EVALUATION**

Final grades will be calculated according to the following criteria:

1. Class Attendance and Participation 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.

#### **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 \(lit.edu\)](#).

#### **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.