SYLLABUS - Physical Hazards Control - OSHT 1209

CREDIT 2 semester credit hours (2 hour lecture, 1 hour lab)

MODE OF INSTRUCTION Face to Face. Monday 7.00pm – 9.55pm

PREREQUISITE/CO-REQUISITE: N/A

COURSE DESCRIPTION

A study of the physical hazards in industry and the methods of workplace design and redesign to control these hazards. Emphasis on the regulation codes and standards associated with the control of physical hazards.

COURSE OBJECTIVES

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

- **1.** Identify the common physical hazards in industry.
- 2. Design a hazard free work environment.
- 3. Utilize hazard recognition techniques to implement safe control practices.
- **4.** Describe the hazard control measures used in workplace designs.
- **5.** List Occupational Safety and Health Administration (OSHA) standards and other regulations.

INSTRUCTOR CONTACT INFORMATION

| (Appointment Recommended). | | | | | |
|----------------------------|--------------------------------|------------------------|--|--|--|
| Office Hours: | Monday – Thursday 2.00-5.00pm. | Friday 11.00am-12.00pm | | | |
| Office Location: | MPC 239 | | | | |
| Office Phone: | 409 247 5283 | | | | |
| Email: | rpwhittaker@lit.edu | | | | |
| Instructor: | R. Peter Whittaker MHS REHS | | | | |

REQUIRED TEXTBOOK AND MATERIALS

- Accident Prevention Manual for Business & Industry, Engineering and Technology by Philip E. Hagan, John F. Montgomery, James T. O'Reilly, 14th Edition. NSC Press. ISBN number is: 978-0-87912-322-2
- 2. USB Flashdrive.



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 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.

| DATE <u>Week 1</u> 1/20/25 | TOPIC Monday – MLK Day - Campus Closed | READINGS (Due on this Date) | ASSIGNMENTS (Due on this Date) |
|----------------------------------|---|--|--|
| <u>Week 2</u> 1/27/25 | Course Introduction and Policies and Widget Project Example & Processes | Week 2 Powerpoint | |
| <u>Week 3</u> 2/3/25 | Applying the Widget Project | Week 3 Powerpoint | |
| <u>Week 4</u> 2/10/25 | Buildings and Facility Layout | Week 4 Powerpoint Chapter 2. pp. 27-55 | |
| <u>Week 5</u> 2/17/25 | Safety Through Design | Week 5 Powerpoint Chapter 1. pp. 3-21 | |
| <u>Week 6</u> 2/24/25 | EXAM 1 (2/24/25). Followed by: Materials Handling and Storage | Week 6 Powerpoint Chapter 12. pp. 353- 384 | <u>Exam 1</u> On Week 1 – 5 Material Monday 2/24/25 |
| <u>Week 7</u> 3/3/25 | Hoisting and Conveying Equipment | Week 7 Powerpoint Chapter 13. pp. 389- 443 | |
| Week 8 | SPRING BREAK (NO CLASSES) (Week of 3/10/25) | | |
| <u>Week 9</u> 3/17/25 | Ropes, Chains, and Slings | Week 9 Powerpoint Chapter 14. pp. 447- 474 | |

COURSE CALENDAR

| <u>Week 10</u> 3/24/25 | Powered Industrial Trucks/Traffic within the plant | Week 10 Powerpoint Chapter 15. pp.477- 496 | Outline of Proposal for Class Presentation to be submitted in writing on Monday 3/24/25 |
|---------------------------|---|---|--|
| <u>Week 11</u> 3/31/25 | EXAM 2 (3/31/25). Followed by: Welding and Cutting | Week 11 Powerpoint Chapter 19. pp. 573- 596 | <u>Exam 2</u> On Week 6 – 10 Material Monday 3/31/25 |
| <u>Week 12</u> 4/7/25 | Fire Protection | Week 12 Powerpoint Chapter 9. pp. 267-315 | |
| <u>Week 13</u> 4/14/25 | Flammable and Combustible Liquids | Week 13 Powerpoint Chapter 10. pp. 319- 344 | |
| <u>Week 14</u> 4/21/25 | Electrical Safety | Week 14 Powerpoint Chapter 8. pp. 221-262 | |
| <u>Week 15</u> 4/28/25 | Class Presentations of Selected Topic | | Class Presentations of Selected Topic commence Monday 4/28/25 |
| <u>Week 16</u> 5/5/25 | EXAM 3 (5/5/25). Followed by: Class Presentations of Selected Topic | | <u>Exam 3</u> On Week 11 – 14 Material Monday 5/5/25 |
| <u>Week 17</u> 5/12/25 | Comprehensive Final Exam Monday 5/12/25. Followed by: Conclusion of Class Presentations. | | <u>Comprehensive</u> <u>Final Exam</u> Monday 5/12/25 |

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

| 1. | Class Attendance and Participation | 10% |
|----|------------------------------------|-----|
| 2. | Three Class Tests (3 x 20%) | 60% |

- 3. Class Presentation of Selected Topic/Instrument 10%
- 4. Final Exam 20%

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 <u>https://lit.edu/online-learning/online-learning-minimum-computer-requirements</u>. 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 <u>special Populations@lit.edu</u>. You may also visit the online resource at <u>Special Populations - Lamar Institute of Technology (lit.edu</u>).

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 <u>www.lit.edu</u>. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

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.

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.