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
2. USB Flash drive
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

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>READINGS (Due on this Date)</th>
<th>ASSIGNMENTS (Due on this Date)</th>
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</thead>
<tbody>
<tr>
<td>Week 1 – January 17</td>
<td>Course Objectives, Syllabus, Policies and Expectations</td>
<td>Chapter 15</td>
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<td>Week 2 – January 24</td>
<td>Air Sampling</td>
<td>Chapter 16</td>
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<td>Week 3 – January 31</td>
<td>Direct Reading Instruments for Gases, Vapors, and Particulates</td>
<td>Chapter 17</td>
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<td>Week 4 - February 7</td>
<td>Methods of Control</td>
<td>Chapter 18</td>
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<td>Week 5 - February 14</td>
<td>EXAM 1</td>
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<td>Exam 1</td>
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<tr>
<td>Week 6 – February 21</td>
<td>Local Exhaust Ventilation</td>
<td>Chapter 19</td>
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<td>Week 7 – February 28</td>
<td>Dilution Ventilation of Industrial Workplaces</td>
<td>Chapter 20</td>
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<td>Week 8 – March 7</td>
<td>General Ventilation of Non-Industrial Occupancies</td>
<td>Chapter 21</td>
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<tr>
<td>Week 9 – March 14</td>
<td>SPRING BREAK (NO CLASSES)</td>
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<td>Week 10 – March 21</td>
<td>Chapter 22 Respiratory Protection</td>
<td>Chapter 22</td>
<td>Outline of Proposal for Class Presentation to be submitted in writing on 3/28/23</td>
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<td>Week 11 – March 28</td>
<td>Personal Protective Equipment</td>
<td>Chapter 23</td>
<td>Class Presentation Proposal Due</td>
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<td>Week 12 – April 4</td>
<td>EXAM 2</td>
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<td>Exam 2</td>
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<td>Week 13 – April 11</td>
<td>The Industrial Hygienist and The Safety Professional Managing Diversity, &amp; Career Challenges</td>
<td>Chapter 24 Chapter 25</td>
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<td>Week 14 – April 18</td>
<td>The Occupational Medical Physician and The Occupational Nurse</td>
<td>Chapter 26 Chapter 27</td>
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<td>Week 15 – April 25</td>
<td>Class Presentations of Selected Topic. Environmental Health and Safety, and IH Programs</td>
<td>Chapter 28 Chapter 29 Class Presentations of Selected Topic commence</td>
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<td>Week 16 – May 2</td>
<td>Government Regulations and International Developments</td>
<td>Chapter 30 Chapter 31 Class Presentations of Selected Topic continue to finish</td>
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<td>Week 17 – May 9</td>
<td>FINAL EXAM</td>
<td>Comprehensive Final Exam</td>
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**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](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 homepage. 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.