

Oakland University
School of Health Sciences
Environmental Health and Safety Program

Course Syllabus:
EHS 3350 – Fundamentals of Occupational Hygiene – Winter 2018

Instructor and Class Meeting Information:

Instructor: Patrick Frazee, CSP
Office: 3172 HHB, Oakland University
Office Hours: Online – Wednesdays from 5 to 6 PM
Phone: 248.364.8652
E-mail: frazee@oakland.edu
Class Sessions: Online – Wednesdays from 7:30 – 9:00 PM. Sessions will be recorded for later viewing.
Class Location: Online
Lab Location: N/A

Catalog Description:

Principles and practices on the control aspects (engineering, administrative, and personal protection) of chemical, physical and biological hazards in the industrial environment.

Prerequisites: CHM 2010, PHY 1200, EHS 3380.

Required Text & Class Materials:

Plog, Barbara A., Fundamentals of Industrial Hygiene, 6th Edition, National Safety Council, 2012

References:

Posted weekly on Moodle.

Course Objectives:

At the conclusion of the course, participants should be able to:

1. Anticipate, recognize, evaluate, and control common chemical, physical, and biological hazards in the workplace.
2. Describe the routes of exposure to chemical hazards.
3. Describe how to monitor the workplace environment hazards.
4. Apply the basic concepts of ventilation design and the reduction of workplace health hazards.
5. Explain the effects of exposure to high levels of noise and other common workplace environmental hazards.

Class Schedule (Tentative):

<u>Week</u>	<u>Topic and Assignment</u>
1	Introduction, history and background of Occupational Hygiene; Occupational Hygiene Professions.
2	Toxicology – Dose/Response, TLV's/Regulations
3	Recognition/Evaluation and Control; Calibration, sampling, calculations
4	Recognition/Evaluation – Lung Toxicology and Particles, Nanoparticles.
5	Recognition/Evaluation – Gases/Vapors; Skin absorption.
6	Recognition/Evaluation – Noise
7	Mid -Term Examination.
8	Winter Recess (February 18 to February 27)
9	Recognition/Evaluation – Thermal stress.
10	Recognition/Evaluation – Ionizing Radiation
11	Recognition/Evaluation – Nonionizing Radiation
12	Recognition/Evaluation - Biological
13	Recognition/Evaluation - Ergonomics
14	Controls – Hierarchy of controls; Ventilation
15	Controls - PPE
16	Final Examination.

*Quizzes may be given at any time.

* LATE ASSIGNMENTS WILL NOT BE ACCEPTED.

Grading Criteria:*

Assignments – 20%
Participation – 5 %
Quizzes – 15%
Midterm Exam – 30%
Final Exam – 30%
Total –100%

*Actual percentages may vary depending on changes that may occur during the course throughout the semester.

No late submittal of assignments will be accepted. There will be no makeup quizzes or exams.

Proctoring of Exams:

All examinations in this class will be proctored by ProctorU. Please make adequate accommodations for the examination proctoring fees. ProctorU is a live online proctoring service that allows you to take your exam from the comfort of your home. ProctorU is available 24/7, however you will need to schedule your proctoring session at least 72 hours in advance to avoid any on demand scheduling fees. Creating a ProctorU account is very simple. All you will need to do is visit <http://proctoru.com/portal/oakland>.

ProctorU also provides free technical support to ensure you have the best testing situation possible. That is available at www.proctoru.com/testitout . On this page you will also be able to test your equipment, learn about what to expect during your proctoring session, and ask any questions you may have about the proctoring process with a ProctorU representative.

In order to use ProctorU you will need to have a high-speed internet connection, a webcam (internal or external), a windows or apple Operating System, and a government issued photo id. ProctorU recommends that you visit proctoru.com/testitout prior to your proctoring session to test your equipment. For additional technical services needed before your exam, you can click on the button that says “connect to a live person.”

Oakland University Portal Page

url: <http://proctoru.com/portal/oakland>

Test Taker Walk Through Video

url: <https://vimeo.com/107066503>

Academic Conduct Policy:

Plagiarism, falsifying records or reports, and unauthorized collaboration, access, or modifying of computer programs are considered serious breaches of academic conduct. The Oakland University policy on academic conduct will be strictly followed with no exceptions. See the OU catalog under Academic Policies and Procedures in this regard. The mid-term and final exams cannot be taken in the OU library or any other public place without permission from the instructor.

Add/Drops:

The University add/drop policy will be explicitly followed. It is the student's responsibility to be aware of the University deadline dates for dropping the course.
Important dates:

Jan. 17 – last day for: 100% refund, add a class, declare audit, “no grade” drop.

Jan 26 – Last day to file application for degree/certificates for winter 2017

March 14 – last day to withdraw

Grading Scale:

Assigned Grade:	Percent:	Letter Grade
4.0	97-100	
3.9	95-96	
3.8	93-94	
3.7	91-92	
3.6	90	A
3.5	89	
3.4	87-88	
3.3	85-86	
3.2	83-84	
3.1	81-82	
3.0	80	B
2.9	79	
2.8	78	
2.7	77	
2.6	76	
2.5	75	
2.4	74	
2.3	73	
2.2	72	
2.1	71	
2.0	70	C
1.9	69	
1.8	68	
1.7	67	
1.6	66	
1.5	65	
1.4	64	
1.3	63	
1.2	62	
1.1	61	
1.0	60	D
0.0	59 or below	F