ENVH 460/560  Occupational Safety Management

ENVH 460 - 3 Credits    ENVH 560-4 Credits
Instructor Name:  Rick Gleason, CIH, CSP    Winter 2022

Time: Tuesdays 11:30 am - 2:20 pm
Location: HST T-530 and Remotely by Zoom

Winter Quarter, 2022, 4 credits for ENVH 560 / 3 Credits for ENVH 460, 10 weeks

Time: Tuesday, 11:30 – 2:20 pm (ENVH 460 and 560)
Location: Online

Instructor: Rick Gleason, MSPH, CIH, CSP  rgleason@uw.edu (mailto:rgleason@uw.edu)

Phone: (206) 856-6660
rgleason@uw.edu

Office Hours by appointment

Richard Gleason is inviting you to a scheduled Zoom meeting.

Topic: ENVH 460/560
Time: Jan 4, 2022 11:30 AM Pacific Time (US and Canada)
Every week on Tue, until Mar 9, 2021, 11 occurrence(s)
Jan 4, 2022 11:30 AM
Jan 11, 2022 11:30 AM
Jan 18, 2022 11:30 AM
Jan 25, 2022 11:30 AM
Feb 1, 2022 11:30 AM
Feb 8, 2022 11:30 AM
Feb 15, 2022 11:30 AM
Feb 22, 2022 11:30 AM
Mar 1, 2022 11:30 AM
Mar 8, 2022 11:30 AM
Mar 15, 2022 11:30 AM
Join Zoom Meeting

[https://washington.zoom.us/j/92315084115](https://washington.zoom.us/j/92315084115)

Each student will give a presentation to the entire class of approximately 15 minutes and approximately 15 powerpoint slides. Each student should also prepare 3 questions regarding their topic at the end of their powerpoint. The presentation will be worth 75 points. Questions from the student presentation will be incorporated into the final exam.

Total points for the class are 10 weekly assignments of 25 points each

One presentation 75 points one final exam 75 points for a total of 400 points. Attendence by Zoom will add 100 bonus points (10 sessions x 10 weeks).

You can find model powerpoint programs in the Files section to the left as well as on the Labor and Industries DOSH Website:


ENVH 460/560 Presentations

January 11, 2022

Workplace Violence Prevention_____Yoni ______________

Driving Motor Vehicle Safety_____Mae Clare________________

Introduction to OSHA _____Ed________

Respirable Silica __________Sheina

January 18, 2022

Late Night Retail Worker Safety___Kau'i

Access Medical Records Exposure____Saida____

Office Safety______Saudo_________________

Teen Safety_______Helen___________________

January 25, 2022

Machine Guarding_________Belen__________________
Lockout-Tagout (LOTO) ___ Tom
Electrical Safety _______ Shelley
Heat Illness_______ Rachel

February 1, 2022
Fire Extinguishers________ Yuhaniz
Confined Spaces_____ Lily
Welding Safety_______ Chad
Process Safety Management___ Sarah

February 8, 2022
Hearing Conservation Noise____ Jesus
Arsenic_______ Jerry
Respiratory Protection___ McKay
Hazcom Chemical Hazard Communication (GHS)__ Cristina

February 15, 2022
Flammable Material Storage____ Yen
Bloodborne Pathogens_______ Greta
Solvent Safety_______ Jack
Occupational Asthma____ Ava

February 21, 2022
Forklift (Powered Industrial Trucks) ___ Kira
Eye Safety________ Jessie
Hand Safety________________________
Ergonomics

March 1, 2022

OSHA Recordkeeping

Egress Fire

Preventing Slips Trips and Falls__Issavel

Scaffold Safety___Prenav

March 8, 2022

Methylene Chloride___Asmitha

Emergency Eyewash___Helen

Last Assignment Due March 15, 2022  No Class

Text provided free as a PDF under the course File Section. It is the OSHA 7500 Introduction to Safety and Health Management (330 pages) provided by the Pacific Northwest OSHA Training Center, Region X.

Course Description:

This class will cover the basics of a company safety and health program and the minimum requirements under Federal OSHA and State OSHA. Students will also receive their 30 hour OSHA General Industry Safety and Health Training Card from OSHA at the successful completion of the course. All students will present their findings for specific industry hazards and graduate students will develop an additional industry safety and health written accident prevention program.

Each student will give a presentation to the entire class of approximately 15 minutes and approximately 15 powerpoint slides. Each student should also prepare 30 copies of a short quiz with 3 questions regarding their topic. Students in attendance will be able to take the quiz and receive extra credit for listening attentively to their peers. The presentation will be worth 75 points.

Total points for the class are 10 weekly assignments of 25 points each
One presentation 75 points one final exam 75 points for a total of 400 points. Weekly students questions from their presentation can also add 75 bonus points if you are in class and complete the quizzes.

Access and Accommodations

Your experience in this class is important to me. If you have already established accommodations with Disability Resources for Students (DRS), please communicate your approved accommodations to me at your earliest convenience so we can discuss your needs in this course.

If you have not yet established services through DRS, but have a temporary health condition or permanent disability that requires accommodations (conditions include but are not limited to mental health, attention-related, learning, vision, hearing, physical or health impacts), you are welcome to contact DRS at 206-543-8924 or uwdrs@uw.edu or disability.uw.edu (http://depts.washington.edu/uwdrs/). DRS offers resources and coordinates reasonable accommodations for students with disabilities and/or temporary health conditions. Reasonable accommodations are established through an interactive process between you, your instructor(s) and DRS. It is the policy and practice of the University of Washington to create inclusive and accessible learning environments consistent with federal and state law.

Religious Accommodations

Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW’s policy, including more information about how to request an accommodation, is available at Religious Accommodations Policy (https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/). Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form (https://registrar.washington.edu/students/religious-accommodations-request/).

Learning Objectives: At the end of this course, the student will be able to:

1. identify the components needed to provide a safe and healthful work environment through case studies and review of injury statistics provided in the course.
2. analyze safety and health issues resulting from worker complaints or OSHA violations and suggest potential remedies.
3. identify potential workplace safety and health hazards and determine how to mitigate the hazards through engineering controls, administrative controls and personal protective equipment.
4. demonstrate research skills necessary for mastery of the topic, which will entail a presentation on a specific industry. Worker compensation claims in the industry selected by the student will be evaluated and injury prevention methods reviewed in the report.
5. conduct basic safety inspections using strategies that they have developed through hazard identification and job hazard analysis.
6. identify and demonstrate a working knowledge of the occupational health and safety regulations contained in the Federal Register under the 29 CFR 1910 standards.
7. review the principles for developing and implementing a successful occupational health and safety program and evaluation of a work site.
8. identify the major historical events that influenced accident prevention activities in the pre/post industrial revolution.
9. compare past and contemporary philosophies of safety and accident prevention as well as be able to compare injury data from previous decades.
10. identify the moral and economic consequences associated with the major classifications and causes of accidents and the cost of workers compensation based on the risk classes of industries.
11. apply psychological principles to individual acts of unsafe behavior and unsafe acts and the prevention of each.
12. explain the causal relationship between accidents and liability including the no fault workers compensation system and the third party liability type lawsuit.
13. identify the requirements of training programs in the workplace under the existing OSHA and State-OSHA Requirements.
14. identify basic fire prevention and protection programs in the workplace.
15. identify essential elements of an occupational safety and health program and the components of international standard organizations in safety and health..
16. describe basic components of an effective company safety and health program including management commitment, employee involvement, hazard recognition and control and training.
17. understand the major classifications and causes of accidents and cost of workers compensation

**WEEK Monday Class: Chapters/Topic(s)/Events**

Jan. 5, 2021  Introduction to OSHA and WISHA, Workers Compensation  
Accidents and Their Effects, Consensus Standards, Accident Causation

Jan. 12, 2021  The OSHAct, Standards, and Liability  
OSHA WISHA Inspections, Violations, Citations, Appeals,  
Building Codes, Working Alone, Silica, Cranes in General  
Industry
Jan. 19, 2021                  Late Night retail -Violence Prevention / Driving Safety, 
                      Motor Vehicle Safety  /  Access to Medical records

                      Office Safety/Teen Safety

                      Lockout-Tagout 1910.147
                      Electrical Hazards (Subpart S)
                      Heat Illness (Outdoor Heat Related Illness)

Feb. 2, 2021                  Fire and Emergency Egress
                      Fire Extinguishers
                      Confined Spaces (1910.146)
                      Welding Safety
                      Process Safety management

Feb. 9, 2021                  Ventilation, Exposure Controls, Noise 1910.95
                      Respiratory Protection (1910.134)
                      HazCom Chemical Hazard Communication, MSDS / 
                      Asbestos / Arsenic

Feb. 16, 2021                 Storage of Flammable Materials
                      Bloodborne Pathogens (1910.130)
                      Methylene Chloride  /  Occupational Asthma

Feb. 23, 2021                 Forklift Safety (Material Handling) (1910.178)
Personal Protective Equipment (1910.132) / Eye Safety / Hand Safety / Ergonomics

March 2, 2021  OSHA RecordKeeping / Emergency Eyewash /
Ladder Safety / Scaffold Safety

March 9, 2021  Accident and Incident Investigation  (Last Class)
Root Cause Analysis  Last Class
Take Home Exam Provided on Canvas

March 16, 2019  Take Home Final Exam Due

Grading

Undergraduate grades (ENVH 460) are based upon a midterm (25%), a final (25%), a 20 minute oral presentation to the class for a specific industry (25%) and Homework (25%).

Graduate Grades (ENVH 560) are bases upon a midterm (20%), a final (20%), a written Company Health and Safety Program (25%), a 20 minute oral presentation to the class for a specific industry (15%) and Homework (20%).

To request academic accommodations due to a disability, please contact Disability Resources for Students, 448 Schmitz Hall, 206-543-8924 (V/TTY). If you have a letter from Disability Resources for Students indicating that you have a disability which requires academic accommodations, please present the letter to me so we can discuss the accommodations you might need in this class.

- Academic Integrity Statement - Students at the University of Washington (UW) are expected to maintain the highest standards of academic conduct, professional honesty, and personal integrity. The UW School of Public Health (SPH) is committed to upholding standards of academic integrity consistent with the academic and professional communities of which it is a part. Plagiarism, cheating, and other misconduct are serious violations of the University of Washington Student Conduct Code (WAC 478-120). We expect you to know and follow the university’s policies on cheating and plagiarism, and the SPH Academic Integrity Policy (http://sph.washington.edu/students/academicintegrity/). Any suspected cases of academic
misconduct will be handled according to University of Washington regulations. For more information, see the University of Washington Community Standards and Student Conduct website.

Additional Graduate Student ENVH 560 Organizing and Administering Industrial Safety and Health Programs Class Assignment  (Undergraduate Students are not required to complete this assignment)

Each **graduate** student will write a complete Company Health and Safety Accident Prevention Program for a specific type of industry. The list below gives examples of the types of industries and the types of chapters in your manual. A presentation to the class on the hazards of that industry will also be provided.

Possible Industries (although you can select any type of industry you would like)

- Aluminum Smelter
- Meat Packing
- Auto Repair Shops
- Metal Fabrication Shop
- Bakery
- Mining
- Chemical Manufacturer
- Pesticide Applicator
- Construction Industry
- Petroleum Refining
- Food Processing
- Plating Shop
- Foundry
- Plumbing Contractor
- Grain Elevator
- Pulp Mill
- Grocery Store
- Retail Establishment
- Hospital/ Health Care
- Sawmill
- Laboratory
- Service Station
- Laundry
- Shipbuilding
- Logging
- Etc.

These are some of the chapters that will need to be considered for your manual:

- *Accident Prevention*
- *Chemical Hazard Communication, MSDS*
*Personal Protective Equipment, Job Hazard Assessment

*Ergonomics

New Employee Orientation

Hearing Protection

Respiratory Protection

Medical Monitoring

Bloodborne Pathogen Program

Asbestos Awareness

Lockout-Tagout

Confined Space Entry

Machine Guarding

Motor Vehicle Safety

Ergonomics

Electrical Safety

Fall Protection

Fire Protection/Emergencies

There should be at least 8 chapters. The first four *must be included and any of the other topics could be included in the remainder of the chapters.

All students who successfully complete the course will also receive an OSHA 511 30 hour General Industry Safety and Health Standards Card.

Course Summary:

<table>
<thead>
<tr>
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<th>Details</th>
<th>Due</th>
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<tbody>
<tr>
<td>Tue Mar 19, 2019</td>
<td>Assignment 12 Graduate Student Acc. Prev Program (<a href="https://canvas.uw.edu/courses/1515812/assignments/6801795">https://canvas.uw.edu/courses/1515812/assignments/6801795</a>)</td>
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<td><a href="https://canvas.uw.edu/courses/1515812/assignments/6801804">Roll Call Attendance</a></td>
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