ENVH 460/560 Occupational Safety Management

ENVH 460 - 3 Credits   ENVH 560-4 Credits
Instructor Name: Rick Gleason, CIH, CSP   Winter 2019
rgleason@uw.edu (mailto:rgleason@uw.edu)   (206) 856-6660

Time: Tuesdays 10:30 am - 1:20 pm
Location: South Campus Center Room 301

Spring Quarter, 2018, 4 credits for ENVH 560 / 3 Credits for ENVH 460, 10 weeks

Time: Tuesday, 10:30 – 1:20 pm (ENVH 460 and 560)
Location: SCC 301

Instructor: Rick Gleason, MSPH, CIH, CSP   rgleason@uw.edu (mailto:rgleason@uw.edu)
Phone: (206) 856-6660

http://faculty.washington.edu/rgleason (http://faculty.washington.edu/rgleason)

Office Hours by appointment

Text None Required. Everything will be available free online.

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.

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.

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

Jan. 8, 2019  Introduction to OSHA and WISHA, Workers Compensation

Accidents and Their Effects, Consensus Standards, Accident Causation
Jan. 15, 2019  The OSHAct, Standards, and Liability

OSHA WISHA Inspections, Violations, Citations, Appeals, Building Codes, Working Alone, Silica, Cranes in General Industry

Jan. 22, 2019  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. 5, 2019  Fire and Emergency Egress

Fire Extinguishers

Confined Spaces (1910.146)

Welding Safety

Process Safety management

Feb. 12, 2019  Noise 1910.95

Respiratory Protection (1910.134)

HazCom Chemical Hazard Communication, MSDS /

Asbestos / Arsenic

Feb. 19, 2019  Storage of Flammable Materials

Bloodborne Pathogens (1910.130)

Methylene Chloride / Occupational Asthma
Feb. 26, 2019  Forklift Safety (Material Handling) (1910.178)
Personal Protective Equipment (1910.132) / Eye Safety / Hand Safety / Ergonomics

March 5, 2019  OSHA RecordKeeping / Emergency Eyewash /
Ladder Safety / Scaffold Safety

March 12, 2019  Accident and Incident Investigation  (Last Class)
Root Cause Analysis  Last Class
Take Home Exam Provided on Canvas

March 19, 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)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Industry</th>
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<tbody>
<tr>
<td>Aluminum Smelter</td>
<td>Meat Packing</td>
</tr>
<tr>
<td>Auto Repair Shops</td>
<td>Metal Fabrication Shop</td>
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<tr>
<td>Bakery</td>
<td>Mining</td>
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<tr>
<td>Chemical Manufacturer</td>
<td>Pesticide Applicator</td>
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<tr>
<td>Construction Industry</td>
<td>Petroleum Refining</td>
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<tr>
<td>Food Processing</td>
<td>Plating Shop</td>
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<td>Foundry</td>
<td>Plumbing Contractor</td>
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<tr>
<td>Grain Elevator</td>
<td>Pulp Mill</td>
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<tr>
<td>Grocery Store</td>
<td>Retail Establishment</td>
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<tr>
<td>Hospital/ Health Care</td>
<td>Sawmill</td>
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<tr>
<td>Laboratory</td>
<td>Service Station</td>
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<tr>
<td>Laundry</td>
<td>Shipbuilding</td>
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<td>Logging</td>
<td>Etc.</td>
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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
Course Summary:

<table>
<thead>
<tr>
<th>Date</th>
<th>Details</th>
<th>Due Time</th>
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<tbody>
<tr>
<td>Tue Jul 11, 2017</td>
<td><a href="https://canvas.uw.edu/courses/1264008/assignments/4475294">Assignment 12 Graduate Student Acc. Prev Program</a></td>
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<tr>
<td>Tue Jun 5, 2018</td>
<td><a href="https://canvas.uw.edu/courses/1264008/assignments/4475295">Assignment 13 Final Exam Due June 5 Take Home Open Book</a></td>
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<tr>
<td>Tue Jan 15, 2019</td>
<td><a href="https://canvas.uw.edu/courses/1264008/assignments/4475292">Assignment 1</a></td>
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<td>Tue Jan 22, 2019</td>
<td><a href="https://canvas.uw.edu/courses/1264008/assignments/4475296">Assignment 2</a></td>
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<td>Tue Feb 5, 2019</td>
<td><a href="https://canvas.uw.edu/courses/1264008/assignments/4475298">Assignment 4</a></td>
<td>10:30am</td>
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*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  
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.
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<tr>
<td>Tue Feb 12, 2019</td>
<td>Assignment 5 (<a href="https://canvas.uw.edu/courses/1264008/assignments/4475299">https://canvas.uw.edu/courses/1264008/assignments/4475299</a>)</td>
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<td>Tue Mar 5, 2019</td>
<td>Assignment 7 (<a href="https://canvas.uw.edu/courses/1264008/assignments/4475301">https://canvas.uw.edu/courses/1264008/assignments/4475301</a>)</td>
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<tr>
<td>Tue Mar 12, 2019</td>
<td>Assignment 8 (<a href="https://canvas.uw.edu/courses/1264008/assignments/4475302">https://canvas.uw.edu/courses/1264008/assignments/4475302</a>)</td>
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<td>Tue Mar 19, 2019</td>
<td>Assignment 10 (<a href="https://canvas.uw.edu/courses/1264008/assignments/4475293">https://canvas.uw.edu/courses/1264008/assignments/4475293</a>)</td>
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<td>Assignment 9 (<a href="https://canvas.uw.edu/courses/1264008/assignments/4475303">https://canvas.uw.edu/courses/1264008/assignments/4475303</a>)</td>
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<td>Final (<a href="https://canvas.uw.edu/courses/1264008/assignments/4475291">https://canvas.uw.edu/courses/1264008/assignments/4475291</a>)</td>
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<td>Roll Call Attendance (<a href="https://canvas.uw.edu/courses/1264008/assignments/4475305">https://canvas.uw.edu/courses/1264008/assignments/4475305</a>)</td>
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