Course Syllabus

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ENVH 460/560 Occupational Safety Management

ENVH 460 - 3 Credits ENVH 560-4 Credits
Instructor Name: Rick Gleason, CIH, CSP Winter 2020

Time: Tuesdays 11:30 am - 2:20 pm
Location: South Campus Center Room 308

Winter Quarter, 2020, 4 credits for ENVH 560 / 3 Credits for ENVH 460, 10 weeks

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

Location: SCC 308

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 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** (mailto: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/) (**https://registrar.washington.edu/staffandfaculty/religious-accommodatio…** (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/) (**https://registrar.washington.edu/students/religious-accommodations-requ…** (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 though 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. 7, 2020 Introduction to OSHA and WISHA, Workers Compensation

Accidents and Their Effects, Consensus Standards, Accident Causation

Jan. 14, 2020 The OSHAct, Standards, and Liability

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

Jan. 21, 2020 Late Night retail -Violence Prevention / Driving Safety,
Motor Vehicle Safety / Access to Medical records

Office Safety/Teen Safety

Jan. 28, 2020 Machine Guarding (1910.212)

Lockout-Tagout 1910.147

Electrical Hazards (Subpart S)

Heat Illness (Outdoor Heat Related Illness)

Feb. 4, 2020 Fire and Emergency Egress

Fire Extinguishers

Confined Spaces (1910.146)

Welding Safety

Process Safety management

Feb. 11, 2020 Noise 1910.95

Respiratory Protection (1910.134)

HazCom Chemical Hazard Communication, MSDS / Asbestos / Arsenic

Feb. 18, 2020 Storage of Flammable Materials

Bloodborne Pathogens (1910.130)

Methylene Chloride / Occupational Asthma

Feb. 25, 2020 Forklift Safety (Material Handling) (1910.178)

Personal Protective Equipment (1910.132) / Eye Safety / Hand Safety / Ergonomics

March 3, 2020 OSHA RecordKeeping / Emergency Eyewash /

Ladder Safety / Scaffold Safety

March 10, 2020 Accident and Incident Investigation (Last Class)

Root Cause Analysis Last Class

Take Home Exam Provided on Canvas

March 17, 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	Machine Guarding
Medical Monitoring	Motor Vehicle Safety
Bloodborne Pathogen Program	Ergonomics
Asbestos Awareness	Electrical Safety
Lockout-Tagout	Fall Protection
Confined Space Entry	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:

Date	Details	
Tue Mar 19, 2019	Assignment 12 Graduate Student Acc. Prev Program (https://canvas.uw.edu/courses/1354845/assignments/5079650)	due by 11:59pm
	Final (https://canvas.uw.edu/courses/1354845/assignments/5079647)	due by 11:59pm
Tue Jan 14, 2020	Assignment 1 (https://canvas.uw.edu/courses/1354845/assignments/5079648)	due by 10:30am
Tue Jan 21, 2020	Assignment 2 (https://canvas.uw.edu/courses/1354845/assignments/5079652)	due by 10:30am
Tue Jan 28, 2020	Assignment 3 (https://canvas.uw.edu/courses/1354845/assignments/5079653)	due by 10:30am
Tue Feb 4, 2020	Assignment 4 (https://canvas.uw.edu/courses/1354845/assignments/5079654)	due by 10:30am
Tue Feb 11, 2020	Assignment 5 (https://canvas.uw.edu/courses/1354845/assignments/5079655)	due by 10:30am
Tue Feb 18, 2020	Assignment 6 (https://canvas.uw.edu/courses/1354845/assignments/5079656)	due by 10:30am
Tue Feb 25, 2020	Assignment 7 (https://canvas.uw.edu/courses/1354845/assignments/5079657)	due by 10:30am
Tue Mar 3, 2020	Assignment 8 (https://canvas.uw.edu/courses/1354845/assignments/5079658)	due by 10:30am
Tue Mar 10, 2020	Assignment 9 (https://canvas.uw.edu/courses/1354845/assignments/5079659)	due by 10:30am
Tue Mar 17, 2020	Assignment 10 (https://canvas.uw.edu/courses/1354845/assignments/5079649)	due by 10:30am
	Roll Call Attendance (https://canvas.uw.edu/courses/1354845/assignments/5079660)	