

BUS 1190 - Health and Safety in the Work Environment

Synonym: safety

Location: CCV Campus

Credits: 3

Day/Times: (on-line, et al)

Semester Dates: January 22 - May 6, 2013

Faculty: Contact Information

Materials/Lab Fee:

Course Description/Introduction

This course introduces students to procedures and best practices that promote a healthy, safe, and secure work environment. Components of this course include: safety culture, environmental regulations and enforcement, corporate responsibility, risk analysis and communication, facility & transportation management, hazardous waste management, and emergency planning and response.

Essential Objectives

1. Discuss and understand the role of employee safety and health management as an integral part of the overall management of a business including integration with core values such as product/service delivery, regulatory compliance and customer service.
2. Examine the responsibilities of employees and employers in compliance with local, federal and workplace health, safety, security and environmental regulations.
3. Understand and describe the role and standards of Occupational Safety and Health Administration (OSHA), the Environmental Protection Agency (EPA) and other regulatory bodies in the workplace.
4. Explain safe handling, storage and disposal procedures for hazardous materials and discuss potential impacts of hazardous materials to health and the environment.
5. Demonstrate and describe appropriate reporting procedures and communication for hazardous materials.
6. Discuss the risks, regulations and methods of controlling bloodborne pathogens and diseases in the workplace.
7. Select and describe proper use of personal protective equipment required for workplace tasks.
8. Describe hazard risks and control methods including: confined spaces, moving of materials, machine safeguards, electrical hazards, lock/tag out practices, fire control and protection, ergonomics and injury protection.
9. Evaluate workplace strategies for implementation and continuous improvement in health, safety, security and environmental practices.

Required Texts:

"Emergency Response Guidebook." Neenah, Wisconsin, J.J. Keller Associates, 2012
ISBN 978-1-61099-119-3

Friend, Mark A., and James P. Kohn. *Fundamentals of Occupational Safety & Health (Fifth Edition)*. Government Institutes, 2011.
ISBN 978-1-60590-706-2

Hopwood, Dan and Steve Thompson. *Workplace Safety: A Guide for Small & Midsized Companies*. John Wiley & Sons, Inc., 2006
ISBN 978-0-78213-604-3

Perrow, Charles. *Normal Accidents: Living with High Risk Technologies*. Princeton University Press, 1999.
ISBN 978-0-691-00412-9

Main References:

Cox, B. Doye and Adriane P. Borgias. *Hazardous Materials Management Desk Reference (2nd Edition)*. Bethesda, Maryland, Alliance of Hazardous Materials Professionals, 2005

Occupational Safety & Health Administration (OSHA): <http://osha.gov>

Syllabus Format

Topics, Required Reading, Weekly Discussion, Resource, *The Roving Eye*, Additional Reading, Quiz

Assignment Policy:

Research Guidelines:

Evaluation Criteria: Quizzes & Final Exam

Grading Criteria:

Grading Policy:

Ask Bob?

Academic Honesty

CCV has a commitment to honesty and excellence in academic work and expects the same from all students. Academic dishonesty, or cheating, can occur whenever you present - as you own work - something that you did not do. You can also be guilty of cheating if you help someone else cheat. Being unaware of what constitutes academic dishonesty (such as knowing what plagiarism is) does not absolve a student of the responsibility to be honest in their academic work. Academic dishonesty is taken very seriously and may lead to dismissal from the College.

Additional Texts & Readings

Bauer, Roger L. Safety & Health for Engineers. John Wiley & Sons, Inc. (2nd Edition), 2005
ISBN 978-0-47129-189-3

Davis, Devra. When Smoke Ran Like Water. New York, NY: Basic Books, 2002
ISBN 978-0-46501-522-1

Esty, Daniel C. & Andrew S. Winston. Green to Gold. New Haven: Yale University Press, 2006
ISBN 978-0-300-11997-8

Fair, J. Henry. The Day After Tomorrow. Brooklyn, NY: Powerhouse Books, 2010
ISBN 978-1-57687-560-5

Goetsch, David. Basics of Occupational Safety. Prentice Hall, 2009.
ISBN 978-0-13502-613-7

Manuele, Fred A. Innovations in Safety Management. John Wiley & Sons, Inc., 2001
ISBN 978-0-47143-959-2

Michaud, Patrick A. Accident Prevention & OSHA Compliance. CRC Press, 1995.
ISBN 978-1-56670-150-3

Syllabus - Spring Semester 2013

January 22-28

Topic: Safety Culture

Objective: Understand and discuss the role of employee safety & health management as an integral part of a business, including core values in product delivery and customer service.

Required Readings: Occupational Safety & Health - Chapter 1: Introduction

Required Reading: History of Workplace Safety in the United States, 1880-1970

<http://eh.net/encyclopedia/article/aldrich.safety.workplace.us>

Weekly Discussion: Knowing that the safety & health of the employee in any business is important, how would you apply consistent standards to meet this obligation?

Resource: OH&S: <http://www.ohsonline.com>

The Roving Eye: CCOHS: <http://www.ccohs.ca>

Additional Reading: Davis, Devra. When Smoke Ran Like Water. NY: Basic Books, 2003.
ISBN 978-0-46501-522-1

Quiz

January 29-February 4

Topic: OSHA

Objective: Understand and describe the role and standards of Occupational Safety and Health Administration (OSHA), the Environmental Protection Agency (EPA) and other regulatory bodies in the workplace.

Required Readings: Occupational Safety & Health - Chapter 2: Safety Legislation

Weekly Discussion: Should OSHA standards be mandatory or voluntary? Should the regulation of such standards be determined by state or federal laws?

Resource: OSHA: <http://osha.gov>

The Roving Eye: National Safety Council: <http://www.nsc.org>

Additional Reading:

Quiz

February 5-11

Topic: Corporate Responsibility

Objective: Discuss the responsibilities of employers in compliance with local, federal and workplace health, safety, security and environmental regulations.

Required Readings: Esty, Daniel C. & Andrew S. Winston. *Green to Gold*. New Haven: Yale University Press, 2006.

ISBN 978-0-30011-997-8

Weekly Discussion: Prioritize the Natural Drivers of the "Green Wave" as outlined by Dan Esty in Part 1.

Resource: <http://www.iso.org>

The Roving Eye:

Additional Reading:

Quiz

**Research Project Introduced*

February 12-18

Topic: Facility Operations

Objective: Understand general transportation procedures, record keeping practices, and selection of proper use of personal protective equipment required for workplace tasks.

Required Reading: Occupational Safety & Health - Chapter 17: Transportation Safety

Required Reading II: *Innovations in Safety Management: How to Avoid Bringing Hazards into the Workplace*. "General Design Safety Checklist."

Weekly Discussion: 1. DOT regulations are designed to protect the worker and the environment. How does this change the manner in which you conduct your everyday business? 2. Design a brief safety checklist for your company or organization.

Required Reading III: *Emergency Response Guidebook*. Neenah, Wisconsin, J.J. Keller Associates, 2012. (Signage, manifests, and reporting procedures).

Resource: DOT: <http://www.dot.gov>

The Roving Eye: NAOSMM: <http://www.naosmm.org>

Tour: Environmental Safety Facility, University of Vermont: <http://uvm.edu/safety>

Additional Reading: *Hazardous Materials Management Desk Reference* - Chapter 11: Personal Protective Equipment

Quiz

February 19-25

Topic: Fire Protection

Objective: Display an understanding of state and national fire codes.

Required Reading: Occupational Safety & Health - Chapter 8; Fire Prevention & Protection

Required Reading II: Emergency Response Guidebook con't. (First Responders - Dangerous

Goods Regulations

ISBN 978-1-61099-119-3

Weekly Discussion: How would you begin to develop a proper fire protection plan for your employees?

Resource: NFPA: <http://nfpa.org>

The Roving Eye: American Society of Safety Engineers: <http://asse.org>

Additional Reading:

Quiz

February 26-March 4

Management of Hazardous Materials

Objective: Explain safe handling, storage and disposal procedures for hazardous materials and discuss potential impacts of hazardous materials to health and the environment, including

Underground Storage Tanks & Asbestos.

Required Reading: Occupational Safety & Health - Chapter 15: Hazardous Materials

Required Reading II: Hazardous Materials Management Desk Reference - Chapter 24:

Underground Storage Tanks, and Chapter 29: Asbestos

Weekly Discussion: How do standardized procedures facilitate the handling of hazardous materials?

Resource: RCRA: <http://www.epa.gov/lawsregs/laws/rcra.html>

Resource: U. S. Chemical Safety Board: <http://csb.gov>

The Roving Eye: AHMP: <http://www.achmm.org>

Additional Reading: Emergency Response Guidebook con't. (First Responders dangerous goods regulations).

Quiz

March 5-11

Management of Hazardous Materials II

Objective: Describe specific hazard risks and control methods including: confined spaces, moving of materials, machine safeguards, electrical hazards, lockout/tagout practices, fire control and protection, ergonomics and injury protection.

Required Reading: Emergency Response Guidebook con't. (First Responders - Dangerous Goods Regulations).

Weekly Discussion: How does proper disposal of hazardous waste protect us?

Resource: CERCLA: <http://www.epa.gov/superfund/policy/cercla.htm>

Resource: SARA: <http://www.epa.gov/superfund/policy/sara.htm>

The Roving Eye: Lab Safety Institute: <http://labsafetyinstitute.org>

Additional Reading:

Quiz

March 12-18

Topic: Globally Harmonized System for Hazard Communication

Objective: Describe appropriate individual and group reporting procedures/communication in "chain of command" decisions, and organizational response to hazardous materials emergencies.

Required Reading: <http://www.osha.gov/dsg/hazcom/ghs.html>

Weekly Discussion: How will the new GHS improve regional and global transportation?

Resource:

The Roving Eye:

Additional Reading: Hazardous Materials Management Desk Reference - Chapter 17:
Hazardous Communication Standard

Quiz

March 19-25

Topic: Toxicology

Objective: Understanding the factors affecting responses to toxic agents.

Required Reading: Occupational Safety & Health - Chapter 6: Introduction to Industrial Hygiene

Weekly Discussion: How can you protect yourself and others against toxic substances?

Resource: CDC: <http://www.cdc.gov>

The Roving Eye: NIH: <http://nih.gov>

Additional Reading: Hazardous Materials Management Desk Reference - Chapter 12:
Industrial Toxicology

Quiz

March 26-April 1

Topic: BioSafety in the Workplace

Objective: Discuss the risks, regulations and universal precautions for bloodborne pathogens (BBP) and other diseases in the workplace.

Required Reading: <http://osha.gov>

Weekly Discussion: What is the most effective way to train employees about bio-safety standards?

Resource: ABSA: <http://absa.org>

The Roving Eye: NIEHS: <http://ehp03.niehs.gov/home.action>

Additional Reading:

Guest Speaker: UVM BioSafety Officer: <http://uvm.edu/safety>

Quiz

April 2-8

Topic: Toxic Disasters

Objective: Understanding of universal initiatives to mitigate past and recurring hazardous waste sites. Review the Toxic Substances, Resource Conservation & Recovery Act (RCRA)

Required Reading: Normal Accidents - Chapter 4: Petrochemical Plants

Weekly Discussion: Are superfunds working?

Resource: TSCA: <http://www.epa.gov/lawsregs/laws/tsca/html>

The Roving Eye:

Additional Reading: Fair, J. Henry. The Day After Tomorrow. Brooklyn, NY: Powerhouse Books, 2010.

ISBN 978-1-57687-560-

Quiz

April 9-15

Topic: Natural Disasters/Emergency Planning & Response

Objective: 1. To develop a general understanding of meteorology and extreme weather, monitoring guidelines. 2. Demonstrate an understanding of unified emergency response to a disaster.

Required Reading: Natural Accidents - Chapter 2: Nuclear Power as a High-Risk System

Required Reading II:

Weekly Discussion: How would you go about setting up an incident command center?

Resource:

The Roving Eye:

Additional Reading: Osnos, Evan. "The Fallout." *The New Yorker* (October 17, 2011): 46-61.

Quiz

*Research Project Due

April 16-22

Topic: Risk Analysis

Objective: Develop an overall facility plan that addresses the risks involve in the workplace, and plan strategies to mininalize those risks to employees.

Required Reading: Occupational Safety & Health - Chapter 14: Terrorism Preparedness

Weekly Discussion: How does including a risk assessment tool to your business structure enhance overall workplace safety?

Resource: Workplace Safety: A Guide for Small & Midsized Companies - Glossary

The Roving Eye:

Additional Reading: Khatchadourian, Raffi. "The Gulf War." *The New Yorker* (March 14, 2011): 37-59.

Quiz

April 23-29

Topic: VOSHA

Objective: Overview of the current Vermont Occupational Safety & Health Administartion (VOSHA) Regulations & Enforcement Process

Required Reading: Conditionally Exempt Generator Handbook. Vermont Department of Environmental Conservation

Weekly Discussion: How do Vermont safety regulations differ, if at all, than most other states?

Resource: VOSHA: <http://www.labor.vermont.gov/?tabid=74>

The Roving Eye:

Additional Reading:

Quiz

April 30-May 6

Final Exam Due

Bob Winkler, CCV September 15, 2012 - Version 2.1