Course Description

An exploration of Federal OSHA standards found in 29 CFR 1902, 1903, 1904, and 1910 regulations. Emphasizes the application of OSHA standards and the basic principles involved in Federal regulatory compliance.

Course Textbook

This course does not require a textbook. Instead, students will refer to the www.osha.gov for Required Reading assignments. The specific reading assignments are listed in each unit.

Course Learning Outcomes

Upon completion of this course, students should be able to:

1. Locate and apply OSHA safety and health standards, policies, and procedures.
2. Utilize OSHA standards and regulations to supplement an ongoing safety and health program.
3. Analyze workplaces for compliance with OSHA standards.
4. Identify common violations of OSHA standards.
5. Develop internal training based on OSHA regulations.

Credits

Upon completion of this course, the students will earn three (3) hours of college credit.

Course Structure

1. **Unit Learning Outcomes**: Each unit contains learning outcomes that specify the measurable skills and knowledge students should gain upon completion of the unit.
2. **Written Lectures**: Each unit contains a Written Lecture, which discusses lesson material.
3. **Reading Assignments**: Each unit contains Reading Assignments from www.osha.gov. The specific links are provided in each unit. Supplemental Readings are provided in Unit I-VII study guides to aid students in their course of study.
4. **Learning Activities (non-graded)**: These non-graded Learning Activities are provided to aid students in their course of study.
5. **Key Terms**: Key Terms are intended to guide students in their course of study. Students should pay particular attention to Key Terms as they represent important concepts within the unit material and reading.
6. **Unit Assignments**: Students are required to submit for grading Assignments in Unit III, VI, and VIII. Specific information and instructions regarding these assignments are provided below. Grading rubrics are included with the Unit III, VI, and VIII Assignments. Specific information about accessing these rubrics is provided below.
7. **Unit Assessments**: This course contains six Unit Assessments, one to be completed at the end of Units I, II, IV, V, VI, and VII. Assessments are composed of multiple-choice questions and written.
8. **Ask the Professor**: This communication forum provides you with an opportunity to ask your professor general or course content related questions.
9. **Student Break Room**: This communication forum allows for casual conversation with your classmates.
CSU Online Library

The CSU Online Library is available to support your courses and programs. The online library includes databases, journals, e-books, and research guides. These resources are always accessible and can be reached through the library webpage. To access the library, log into the myCSU Student Portal, and click on “CSU Online Library.” You can also access the CSU Online Library from the “My Library” button on the course menu for each course in Blackboard.

The CSU Online Library offers several reference services. E-mail (library@columbiasouthern.edu) and telephone (1.877.268.8046) assistance is available Monday – Thursday from 8 am to 5 pm and Friday from 8 am to 3 pm. The library’s chat reference service, Ask a Librarian, is available 24/7; look for the chat box on the online library page.

Librarians can help you develop your research plan or assist you in finding relevant, appropriate, and timely information. Reference requests can include customized keyword search strategies, links to articles, database help, and other services.

Unit Assignments

Unit III Essay

Worksite Hazard Assessment

OSHA’s Personal Protective Equipment Standard requires employers to assess the workplace to determine if hazards are present that necessitate the use of PPE. Based on the assessment, appropriate PPE must be selected and provided to affected employees.

Using Subpart I Appendix B as a guide, develop a hazard assessment for your workplace or a workplace you are familiar with. If you work in an office or other non-hazardous location, develop an assessment for an imagined industrial shop, such as woodworking or metalworking. Use the other sections of Subpart I to help determine the appropriate PPE for each hazard. You can also use online safety equipment catalogs to find examples of PPE that meets the OSHA requirements.

Your submission must be a minimum of two pages. References and citations in APA format should be provided to support the hazard determinations and PPE selection. The reference page does not count towards the two page minimum.

Subpart I Appendix B is located at the following link:

Information about accessing the Blackboard Grading Rubric for this assignment is provided below.

Unit VI PowerPoint Presentation

HAZCOM Training Presentation

The 2012 revision to the Hazard Communication Standard requires that employers train workers on the GHS-compliant hazard warning labels and safety data sheets. (See 1910.1200(h)(3)(iv). Using Appendices C and D of the current standard as a resource, develop a 7-10 slide PowerPoint presentation that can be used to train the employees at your workplace or a workplace you are familiar with. Include examples of the hazardous materials found in your selected workplace in the presentation.

When creating your presentation, be sure your explanations and discussion are in plain language and at a level suitable for your target workforce—do not simply quote the standard. Additional resources can be found at OSHA’s Hazard Communication Page: http://www.osha.gov/dsg/hazcom/index.html

Information about accessing the Blackboard Grading Rubric for this assignment is provided below.

Unit VIII Case Study

Read the background information and scenario description in sections I and II, then answer the questions in section III. Be sure you read the complete directions for preparing your case study.
I. Background: OSHA Standards and Bubba's Materials Handling Equipment, Inc.

Bubba’s Materials Handling Equipment is a small corporation that employs between 38 and 55 employees throughout any given year. This firm manufactures materials handling equipment that includes small cantilever racks; hand trucks, some specially designed for moving 55-gallon drums; and various dollies commonly used in the manufacturing sector. The facility was built in 1958 and is roughly 80,000 square feet. The firm receives raw materials in the form of round metal tubing, sheet metal, square tubing, and cold and hot rolled metal rods.

Raw materials are removed from flatbed trailers using a large LP-gas-powered forklift with the assistance of smaller LP-gas-powered forklifts. These materials are stored in racks in the receiving department. From there, raw materials are moved via forklift and various heavy duty carts to the fabrication department. This department cuts, punches, bends, and shear the various materials into parts used to make the final product.

The metal fabrication equipment includes two iron workers, two 70-ton part revolution mechanical power punch presses, three 250-ton part revolution press brakes, a 300-ton hydraulic press, two pipe benders, a 12-foot shear, a 10-foot shear, a mill for milling a bevel on hand truck toe plates, several off-hand grinders, and two large drill presses. The fabrication department can get quite noisy for days at a time (>85dBA), especially when making cantilever racks. Two maintenance employees keep these machines running. After being cut, punched, bent, and formed, fabricated parts go to the welding department or the Work in Process (WIP) crib. WIP includes a mezzanine and an area populated with pallet racks for storage.

In the welding department, there are 12 MIG welding machines that are used by welders to assemble the parts into the pre-finished items manufactured by the firm. The welders also use an assortment of hand-held grinders and an oxyacetylene torch. Once welded, items either go in their pre-finished condition into inventory or are further processed by the painting department. Pre-finished items that are inventoried are taken to one of two mezzanines or placed in storage racks. In the painting department, items are wiped down with various solvents and hung on an overhead conveyor. Items go into the paint booth where they are painted using various enamels. Xylenes and toluene are common solvents used in this operation. The paints also contain these solvents.

After painting, axles and wheels are applied, and the completed products are boxed or, depending on their size, loaded directly on trucks without packaging. Larger items, such as racks, are loaded onto flatbeds using an unmanned overhead crane controlled by a pendant control. Smaller items are typically loaded onto standard semi-trailers using battery-powered forklifts or pallet jacks.

II. The Scenario:

You have been hired by Bubba himself to put together a safety program for the company. Essentially, the company has no safety programs and has never really conducted any kind of hazard assessment.

III. Questions:

1. Identify 15 of what you consider the highest priority standards that are likely to apply to this operation. Include the code number for the standard, and describe a hazard demonstrating why the standard applies (e.g., Industrial Ventilation, 1910.94. The company has a paint booth that controls paint and solvent vapors).

2. Identify four important written programs this company is required to have (keep in mind that not all standards require that you develop a written program or SOP of some sort; although, many companies develop such SOPs regardless). Explain why you believe they are required to have these written programs.

3. Identify five standards that this company is required to provide training for, and briefly describe why this training is required.

Prepare your response to the questions listed in a properly formatted APA document. The completed paper should be arranged in the appropriate questions/sections identified above. Single-spacing may be used. Please make sure that you have addressed all questions in a full and detailed manner. Include a correctly formatted APA title and reference page. Remember to cite all sources used.

Information about accessing the Blackboard Grading Rubric for this assignment is provided below.

APA Guidelines

The application of the APA writing style shall be practical, functional, and appropriate to each academic level, with the primary purpose being the documentation (citation) of sources. CSU requires that students use APA style for certain
papers and projects. Students should always carefully read and follow assignment directions and review the associated grading rubric when available. Students can find CSU’s Citation Guide in the myCSU Student Portal by clicking on the “Citation Resources” link in the “Learning Resources” area. This document includes examples and sample papers and provides information on how to contact the CSU Success Center.

**Grading Rubrics**

This course utilizes analytic grading rubrics as tools for your professor in assigning grades for all learning activities. Each rubric serves as a guide that communicates the expectations of the learning activity and describes the criteria for each level of achievement. In addition, a rubric is a reference tool that lists evaluation criteria and can help you organize your efforts to meet the requirements of that learning activity. It is imperative for you to familiarize yourself with these rubrics because these are the primary tools your professor uses for assessing learning activities.

Rubric categories include: (1) Journal, (2) Assessment (Written Response), and (3) Assignment. However, it is possible that not all of the listed rubric types will be used in a single course (e.g., some courses may not have Assessments).

The Journal rubric can be found within Unit I’s Journal submission instructions.

The Assessment (Written Response) rubric can be found embedded in a link within the directions for each Unit Assessment. However, these rubrics will only be used when written-response questions appear within the Assessment.

Each Assignment type (e.g., article critique, case study, research paper) will have its own rubric. The Assignment rubrics are built into Blackboard, allowing students to review them prior to beginning the Assignment and again once the Assignment has been scored. This rubric can be accessed via the Assignment link located within the unit where it is to be submitted. Students may also access the rubric through the course menu by selecting “Tools” and then “My Grades.”

Again, it is vitally important for you to become familiar with these rubrics because their application to your Journals, Assessments, and Assignments is the method by which your instructor assigns all grades.

**Communication Forums**

These are non-graded discussion forums that allow you to communicate with your professor and other students. Participation in these discussion forums is encouraged, but not required. You can access these forums with the buttons in the Course Menu. Instructions for subscribing/unsubscribing to these forums are provided below.

*Once you have completed Unit VIII, you MUST unsubscribe from the forum; otherwise, you will continue to receive e-mail updates from the forum. You will not be able to unsubscribe after your course end date*

[Click here for instructions on how to subscribe/unsubscribe and post to the Communication Forums.](#)

**Ask the Professor**

This communication forum provides you with an opportunity to ask your professor general or course content questions. Questions may focus on Blackboard locations of online course components, textbook or course content elaboration, additional guidance on assessment requirements, or general advice from other students.

Questions that are specific in nature, such as inquiries regarding assessment/assignment grades or personal accommodation requests, are NOT to be posted on this forum. If you have questions, comments, or concerns of a non-public nature, please feel free to email your professor. Responses to your post will be addressed or emailed by the professor within 48 hours.

Before posting, please ensure that you have read all relevant course documentation, including the syllabus, assessment/assignment instructions, faculty feedback, and other important information.
**Student Break Room**

This communication forum allows for casual conversation with your classmates. Communication on this forum should always maintain a standard of appropriateness and respect for your fellow classmates. This forum should NOT be used to share assessment answers.

**Grading**

<table>
<thead>
<tr>
<th>Assessment</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Assessments (6 @ 12%)</td>
<td>72%</td>
</tr>
<tr>
<td>Unit III Essay</td>
<td>9%</td>
</tr>
<tr>
<td>Unit VI PowerPoint Presentation</td>
<td>10%</td>
</tr>
<tr>
<td>Unit VIII Case Study</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**Course Schedule/Checklist (PLEASE PRINT)**

The following pages contain a printable Course Schedule to assist you through this course. By following this schedule, you will be assured that you will complete the course within the time allotted.
By following this schedule, you will be assured that you will complete the course within the time allotted. Please keep this schedule for reference as you progress through your course.

<table>
<thead>
<tr>
<th>Unit I</th>
<th>The Occupational Safety and Health Act, OSHA Procedural Standards, and OSHA Recordkeeping Standards</th>
</tr>
</thead>
</table>
| Review: | - Unit Study Guide  
- Learning Activities (Non-Graded): See Study Guide |
- Supplemental Reading: See Study Guide |
| Submit: | - Assessment |
| Notes/Goals: | |

<table>
<thead>
<tr>
<th>Unit II</th>
<th>Subparts D-F: Walking/Working Surfaces, Life Safety, and Personnel Lifting Devices</th>
</tr>
</thead>
</table>
| Review: | - Unit Study Guide  
- Learning Activities (Non-Graded): See Study Guide |
- Supplemental Reading: See Study Guide |
| Submit: | - Assessment |
| Notes/Goals: | |
# BOS 4025, OSHA Standards

## Course Schedule

### Unit III Subparts G–I: Environmental Controls, Hazardous Materials, and Personal Protective Equipment

| Review:          | □ Unit Study Guide  
|                  | □ Learning Activities (Non-Graded): See Study Guide |
| Read:            | □ Become familiar with the subject areas in the table of contents for OSHA standards 1910.94 through 1910.138  
|                  | □ Supplemental Reading: See Study Guide |

| Submit:          | □ Essay |

### Notes/Goals:  

### Unit IV Subparts J–N: Confined Spaces, Lockout/Tagout, Fire Protection, and Material Handling and Storage

| Review:          | □ Unit Study Guide  
|                  | □ Learning Activities (Non-Graded): See Study Guide |
| Read:            | □ Become familiar with the subject areas in the table of contents for OSHA standards 1910.141 through 1910.184.  
|                  | □ Supplemental Reading: See Study Guide |

| Submit:          | □ Assessment |

### Notes/Goals:  

---

**BOS 4025, OSHA Standards**
## Unit V
**Subparts O–S: Machine Guarding, Welding, Special Industries, and Electrical**

<table>
<thead>
<tr>
<th>Review</th>
</tr>
</thead>
</table>
| ☐ Unit Study Guide  
| ☐ **Learning Activities (Non-Graded):** See Study Guide |

<table>
<thead>
<tr>
<th>Read</th>
</tr>
</thead>
</table>
| ☐ Become familiar with the subject areas in the table of contents for OSHA standards 1910.212 through 1910.399.  
| ☐ **Supplemental Reading:** See Study Guide |

<table>
<thead>
<tr>
<th>Submit</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Assessment</td>
</tr>
</tbody>
</table>

Notes/Goals:

---

## Unit VI
**Subpart Z: Toxic and Hazardous Substances**

<table>
<thead>
<tr>
<th>Review</th>
</tr>
</thead>
</table>
| ☐ Unit Study Guide  
| ☐ **Learning Activities (Non-Graded):** See Study Guide |

<table>
<thead>
<tr>
<th>Read</th>
</tr>
</thead>
</table>
| ☐ Become familiar with the subject areas in the table of contents for OSHA standards 1910.1000 through 1910.1450.  
| ☐ **Supplemental Reading:** See Study Guide |

<table>
<thead>
<tr>
<th>Submit</th>
</tr>
</thead>
</table>
| ☐ Assessment  
| ☐ **PowerPoint Presentation** |

Notes/Goals:
## Unit VII
### The General Duty Clause and OSHA Beyond the Standards

**Review:**
- Unit Study Guide
- **Learning Activities (Non-Graded):** See Study Guide

**Read:**
- Become familiar with the subject areas in the table of contents for OSHA standards 1910.94 through 1910.138.
- **Supplemental Reading:** See Study Guide

**Submit:**
- Assessment

### Notes/Goals:

## Unit VIII
### Case Study: OSHA Standards and Bubba’s Material Handling Equipment, Inc.

**Review:**
- Unit Study Guide
- **Learning Activities (Non-Graded):** See Study Guide

**Read:**
- DOD VPP CX: [https://vppcx.org/index.cfm?content=1/](https://vppcx.org/index.cfm?content=1/)

**Submit:**
- Case Study

### Notes/Goals: