



ISC 112, Industrial Safety

DOL DISCLAIMER:

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○○ Learner Support Module

✓ Course Navigation Page

Concept Content:

Course Navigation

Navigational Link Explanations in Canvas

| Navigation Link | What It Is For |
|----------------------|---|
| Home | This is the default home page of the course. Whenever you visit this course, it will open to this page. Anytime an update is added to the homepage, you will be notified via an announcement, which you will receive via email if you have set up your profile to do so. |
| Announcements | This is where you can find any course announcements that have been made, alerting you to important information and/or calls to action. |
| Modules | Our class has been divided into modules by topic. This is where you will find information for the class, such as learning materials, assignments, activities, quizzes, and so on . If you want to know what we will be doing for each week, this is where you want to go. In addition, it is expected that you use modules regularly and in a *sequential* fashion, meaning that you should start with the first page of the module (usually the overview page) and go through each page in order. Some of your assignments, discussions, quizzes, etc. rely on you having gone through the content in the module prior to completing them. [Explain to your students how the modules are being used, i.e., topics, weeks, chapters, etc.] |

| | |
|-----------------|---|
| Syllabus | This page will have highlights of the syllabus, as well as access to download the entire syllabus. This page also provides a "Course Schedule" at the bottom, giving you information about assignments for the course. |
| Grades | This is where you can see your grades for all of your assignments, as well as your overall grade in the course. |
| People | This consists of a list of everyone who is involved with this course. You will see a list of the students, teachers, and others who have access to this course. This is also where you can find groups as well (such as your small group for discussion or for group projects). |

[You can add other helpful information here that may be found in the navigation list, such as instructor info and student resources]

[LMS] and Technology Start-Up Page

Concept Content:

[LMS] and Technology Start-Up

Technology Help

Insert links to what help resources your college has for the LMS technology you use for courses.

Technology for This Course

To successfully complete this course, you need **a laptop or desktop computer with the latest web browser versions and reliable internet access** (preferably DSL or faster).

[School LMS] runs on [list the devices and browsers your school's LMS runs on. If there are some that it runs better on than others, be sure to pinpoint that as well]

Accessing [LMS] on Mobile

[LMS] on Mobile Browsers

[LMS] does not officially support mobile browsers (e.g., iOS Safari, Chrome App, Firefox App). However, in some cases, using the mobile browser may provide a better experience than the official app. It is suggested that you try both methods to find which works best for your device and situation. [If your school's LMS does support mobile browsers, please delete this paragraph]

LMS iOS and Android Apps

If your school's LMS has mobile and android apps, please list them here and provide links for students to access them.

More [LMS] Student Orientations

You can also check out these short [LMS] videos to help you with tasks in [LMS]:

- If your school's LMS provides video tutorials to help students navigate the site, you can link those here. If not, you can just delete this section from the module.



Course Blueprint

Concept Content:

</resources/courses/3095/ISC 112 Course Blueprint.docx>



Student Code of Conduct

Concept Content:

Insert link to your school's code of conduct here.



Cyber Cafe' Q & A

Concept Content:

Welcome to Cyber Café

This is an open discussion board to allow for learners to post questions, announcements and comments to one another.

[Delete this information if posting: generally this is an ungraded discussion post that allows for students to post questions and comments. The instructor can choose whether to participate in the discussion or not. If the instructor decides to participate, please state how often the instructor will check the post and the turnaround time for answering questions. Example: I will check in with the Cyber Cafe every 48 hours and will answer the questions within 24 hours after that. In the meantime, I encourage students to answer one another questions. If you have a question about one of your grades, please email me privately instead of posting in the Cyber Cafe.]



Module 1: Getting Started



1.1 - Getting Started Overview Page

Concept Content:

Getting Started



Welcome!

Welcome to ISC 112, Industrial Safety. **[From here, enter in your introduction to the students. Be sure to mention your background in this subject area and express how excited you are to teach this course. Please try to make your introduction as engaging as possible to the students]**

I hope that you enjoy the class and benefit a great deal from the information. if you have questions at any time, **[insert your preferred contact methods and preferred hours of contact here]** and will respond to you as quickly as possible.

[You can also embed a video introduction here as well. A visual introduction might help engage students even more, but this is not required]

[Instructor Note: This course content has been aligned with OSHA 10 requirements. Meaning, if you are certified to do OSHA 10 instruction, your students will be eligible for OSHA 10 certification at the end of this course]



Course Description & Learning Objectives

Course Description

This course introduces the principles of industrial safety. Emphasis is placed on industrial safety and OSHA regulations. Upon completion students should be able to demonstrate knowledge of a safe working environment and OSHA compliance.

Learning Objectives

At the completion of the course, students should be able to do the following:

1. Demonstrate how to access the Occupational Safety and Health Standards and information that supports the standards.
2. Describe how and why each of the general industry standards were developed.
3. Describe how to abate (lessen in degree) a safety hazard and create a safer working condition.
4. Develop a thorough accident investigation and present it using Power Point.
5. Identify multiple reasons for an accident given a real accident scenario in an industrial setting.
6. Describe in a written report, the different jurisdictions of the OSHA, DOT, and EPA that are involved in an industrial case study.
7. Evaluate ergonomic deficiencies in material handling tasks found in an industrial setting.



Course Objectives

Course Learning Objectives

| Module | Course Objectives By the end of this module, you will be able to: |
|--|--|
| Module 1: Getting Started | <ul style="list-style-type: none">- Develop a class learning community.- Understand course expectations and policies.- Understand academic integrity.- Reflect on goals and expectations for the course.- Identify strategies that will increase learner success in this course. |
| Module 2 Part 1: OSHA and Worker's Compensation | <ul style="list-style-type: none">- Interpret the history of OSHA and the OSHAct of 1970.- Review an introduction to Worker's Compensation. |
| Module 2 Part 2: The Occupational Safety and Health Act of 1971 | <ul style="list-style-type: none">- Explore the history and mission of OSHA.- Identify the development of regulations and standards of the OSHAct.- Review the responsibilities of employers as it pertains to the OSHA standards.- Interpret the intent of the General Duty Clause and what qualifies as a hazard.- Distinguish the history of events leading up to the establishment of the Federal Regulations. |
| Module 2 Part 3: History of OSHA | <ul style="list-style-type: none">- Examine the history of the safety movement.- Identify the cost of accidents.- Understand key terms. |
| Module 3: Lockout/Tagout | <ul style="list-style-type: none">- Become familiar with Lock Out, Tag Out procedures.- Understand why Lock Out, Tag Out procedures are important for industrial safety. |
| Module 4: The Hazard Communication Standard | <ul style="list-style-type: none">- Understand chemicals in the workplace.- Explore the history of the Hazard Communication Standard.- Review the development of the Community Right to Know Act.- Understand what a MSDS is and how to read it.- Explore a local issue with industrial waste.- Review who is responsible for the development of MSDS.- Explore what information is contained in the MSDS. |

| | |
|---|---|
| Module 5: Industrial Hygiene | <ul style="list-style-type: none"> - Identify common workplace health hazards. - Know how to mitigate common workplace health hazards. - Recognize and mitigate the dangers of bloodborne pathogens. |
| Module 6 Part 1: PPE | <ul style="list-style-type: none"> - Analyze how to select and properly wear eye protection. - Determine how to select and wear the best head protection. - Explore the benefits of the use of personal protective clothing and equipment. - |
| Module 7: Machine Safeguarding | <ul style="list-style-type: none"> - Explore Machine Safe-guarding and the Lock Out, Tag Out procedure to control energy. - Assess a piece of equipment to determine risk. - <p>Identify which equipment parts need to be guarded.</p> <ul style="list-style-type: none"> - Interpret the procedure for Lock-Out, Tag-Out. |
| Module 8: Walking Working Surfaces | <ul style="list-style-type: none"> - Review the Department of Labor Statistics for North Carolina workplace fatalities. - Understand the high fatality rate from slip trip and fall accidents. - Determine prevention of those hazards. |
| Module 9: Mid-Term Exam | <ul style="list-style-type: none"> - Review all material from the beginning of the course. |
| Module 10: Electrical Safety | <ul style="list-style-type: none"> - Explore the hazards associated with electricity in the workplace. |
| Module 11: Fire Suppression | <ul style="list-style-type: none"> - Explore Portable Fire Suppression Equipment and Fire Hazards. - Determine the causes of common fire hazards. - Identify fire prevention strategies in the workplace. - Examine how to extinguish a fire using fire suppression equipment. |
| Module 12: Means of Egress and Confined Spaces | <ul style="list-style-type: none"> - Interpret the OSHA standard for Means of Egress (Exits). - Explore examples of cases where the standard was violated and the consequences of non-compliance. - Identify reasons for catastrophic events resulting from blocked exits. - Explore the hazards associated with confined space entry. - Identify how rescue procedures should be handled. - Examine how chemicals react in confined spaces. - |

| | |
|--|--|
| Module 13: Ergonomics | <ul style="list-style-type: none"> - Explore the study of work and the relationship of man to machine. - Examine causation of common muscle, joint and tendon stress related to the workplace. - Interpret how workplace design contributes to occupational injuries. |
| Module 14: Accident Investigation | <ul style="list-style-type: none"> - Explore accident investigation. - Determine the root causes of the accident so that they can be avoided in the future. - Examine prevention of the same or similar accident from happening in the future. |
| Module 15: Accident Investigation Project, Final Exam | <ul style="list-style-type: none"> - Determine the multiple causes of accidents. - Identify methods of reducing accidents. - Complete an accident investigation. - Demonstrate learning in the final exam. |



Checklist

Five Easy Steps to Get Started with This Course

1. Read the syllabus and complete the syllabus scavenger hunt.
2. Review the schedule and make sure course assignments are in your student calendar.
3. View the Course Welcome video.
4. Read Successful Online Student Tips.
5. Introduce yourself to instructor and peers in the Introduction Post.



Notes

Notes/Helpful Tips

Next Steps...

Your Census assignments are REQUIRED in order to remain in the class and they MUST be completed prior to the Census Date **[insert census date here]**.



1.2 - Curriculum & Content Resource Page

Concept Content:

Curriculum & Content

Approximate time to complete all requirements: 1 Hour.

In Module 1, you will explore Getting Started materials that will help you be successful in the course. Before you proceed to Module 2, you must complete the Getting Started module.



Readings

- Syllabus Page
- Schedule Page
- Instructor Information Page
- Successful Online Student Tips



Syllabus

Concept Content:

Insert your syllabus here as a link.



Schedule

Concept Content:

Insert your semester's schedule here as a link.



1.3 - Course Welcome

Concept Content:

Welcome to ISC 112

New Instructors, please modify this introduction with your own bio. See the one below as an example. You could also upload a video introduction to this section.

Welcome to ISC 112, Industrial Safety. I have been teaching this class for over twenty years, both in a face- to-face format and on-line. My background is in education with a Master's degrees in Education and a Master's in Industrial Engineering. I am the former Division Chair of Industrial, Construction and Engineering at GTCC (retired). I previously taught at NCSU in the physical education department and was Assistant Coach of Swimming at NCSU from 1976-1978. I have two daughters; one in Health Information at INOVA in Northern Virginia, and one who teaches Autistic children in the Denver Public Schools in Denver, Colorado. She is also a world class Ultimate Frisbee player and has played on US National teams around the world. I enjoy fly fishing, swimming, art, beekeeping, chicken keeping and gardening!

In this course, you will be introduced to the General Industry Standards of the Occupational Health and Safety Act. This course follows the 30 hour General Industry Standard requirement for manufacturing. I hope that you will find this information helpful as you enter the world of work and for understanding the rights and responsibilities of both the employers and employees in the workplace environment.

I hope that you enjoy the class and benefit a great deal from the information. if you have questions at any time, I am available by text (see the syllabus) and email and will respond to you as quickly as

possible.

Enjoy the class!



1.4 - Instructor Information Page

Concept Content:

Meet Your Instructor

Insert contact information

| | |
|------------------------|--|
| INSERT YOUR IMAGE HERE | <p>Instructor: [Enter your name and title as you wish to be called] Email Address: [Enter your College's email address]</p> <p>Office: [Enter your building, room number and campus. If adjunct, you can eliminate this line]</p> <p>Office Hours: [Clarify the hours you are using for student help. If only use "By Appointment Only" and indicate how to make the appointment]</p> <p>Phone: [Enter a contact number if you wish students to call you]</p> |
| | |

About Me: [Insert a brief bio here]

Communication Preferences:

1. [Email EXAMPLE TEXT-This is the very best way to contact me if you have any personal or grade related questions. My email is INSERT HERE. My turnaround time is 24-48 hours (usually less) on weekdays. **When sending an email, please make sure that you provide the name of the course that you are in AND what section, your full name, and the specific question that you are asking.**]
2. Appointment- [Let students know how and when they can make an appointment with you]



1.5 - Successful Online Student Tips Page

Concept Content:

Getting Started

Online courses definitely offer benefits as well as challenges to learners. On one hand, you have flexibility with your schedule. The challenge is to be a self-starter and dedicate the appropriate amount of time to complete coursework and to engage with your instructor and your peers.

Expectations for the Online Coursework

Communication Expectations

One thing to always keep in mind when taking any course is that the others with whom you interact throughout the semester - including me, your instructor - are human beings. The first rule of netiquette is to "remember the human" when you are communicating with me or with your peers. The second rule is to "adhere to the same standards of behavior online that you follow in real life." It's not likely that you would yell at, mock, or belittle another student in a face-to-face class so don't do it here. The feeling of anonymity that some people have when they are online can lead to those sorts of behaviors but they are **not acceptable** here or in any other online class.

Please take a few minutes and review all the [Core Rules of Netiquette](#) as considerations for when you are attending classes or meetings via Microsoft Teams.

Participation Expectations

You should expect to spend at least two hours per posted ISC 112 assignment. The final project will take more time than the weekly posted lessons.

Attendance Expectations

All students must complete the work for every lesson posted on the **[college LMS]** site for ISC 112. Lessons will be posted each week on Monday and due the following Sunday.

How We'll Learn in this Course

This course is divided into Modules, as listed in the Modules tool. Each module will include:

1. material for you to read, watch, and explore;
2. a practice activity, and
3. a graded assignment to allow you to work with the concepts and resources (sometimes individually, sometimes together).

I will provide you with feedback on each of the assignments so make sure to check your instructor comments.

Read the syllabus for more details on the course requirements.

Tip 1: Ask Questions

Course information will be conveyed via **[Insert College LMS]**: the syllabus, announcements, weekly overview pages, and the assignment details. If something isn't clear, contact your instructor directly in a timely manner.

Tip 2: Log into the Course Daily

Doing coursework at the last minute will not cut it in an online class. Sometimes technology fails. For some assignments, you will receive points for responding to your classmates. This means you will need to allow enough time, usually a few days, to post and respond to others. Sometimes you might start an assignment late in the evening and need to clarify the assignment details. If you do

not leave yourself enough time to fully complete an assignment by the due date and time, you will not receive full credit or credit at all for the assignment. Earlier is always better.

Tip 3: Build Connections with Peers

Being connected to your classmates is an important part of being a successful online student. **[Insert College/Institution Name]** provides terrific resources and tools to help you connect with your online classmates, and it's easier than you think. Reach out to a fellow student [through \[College LMS\]](#), send an email to ask a question, or connect virtually with classmates through your Teams account.

What Do You Need to Succeed?



Books and Materials

- Have your books in hand by the first day of class.
- Make sure you have all the required materials for the course (i.e. webcam).



Visit Your Course Site Daily

- Check out announcements, upcoming assignments, and the current module.



Participate

- Complete all required readings, video-watching, activities, and assignments by the due date.
- Ask questions when you're not sure.



Syllabus

- Read your syllabus.
- Contact your professor with any questions.



Calendar Reminders

- Set up calendar reminders for assignments two days prior to the due date.



Due Dates

- Put the due dates for all your readings and assignments into your calendar.



Block Out Study Time

- Schedule lots of study time throughout the week.
- Keep your study appointment time.



1.6 - Discussion #1: Introductions

Concept Content:

Getting Started: Introductions

Purpose

Let's take a few minutes to meet each other. For this discussion board, you are asked to do a video introduction of yourself. Your introduction should include the following information:

- Your name
- Your program or the certificate or degree you are seeking.
- What is your current career?
- What are your future goals?
- Share something interesting about yourself.
- Share how you are feeling about this course right now.

I encourage you to submit your introduction as a 1-2 minute video. You may also choose to write your introduction.

Learning Objectives

- Develop relationships in this course that supports both personal learning and a productive online learning community.

Instructions

Time: Up to 60 minutes for the initial post and the three responses.

Due Date: August 21

Description: The easiest way to post the 1 to 2 minute video introduction is either by linking to a video you post on You Tube or by using the **[college LMS]** Video Creator. In **[college LMS]**, all you have to is **[insert instructions on how to upload video comments via your college's LMS here]**

Grading Criteria

This discussion will be graded on a 10 point scale:

Deadlines

Please use the following timeline to complete your online discussion:

Original Post: due Friday, August 19

Respond to Peers: Select at least three peers to respond to their introduction videos by Saturday, August 20.

Respond to Peers' Post to your introduction video by Sunday, August 21.



1.7 - Reflection #1: Goals and Expectations

Concept Content:

Pause, Reflect, Question

Instructions

As we start off the semester, let's reflect on our Goals and Expectations for the course. In the discussion below:

1. Tell us your goals, expectations, and concerns about this class.
2. Include 3-5 phrases that characterize your goals, expectations, and concerns.



["meditation much?"](#) ([Links to an external site.](#)) by [NancyFry](#) ([Links to an external site.](#)) is licensed under [CC BY 2.0](#) ([Links to an external site.](#))

You get 30 point(s) for posting a reflection or question(s). I will join the discussion to clarify questions and answers.

- 1.8 - Quiz #1: Syllabus Scavenger Hunt**
- 1.9 - Quiz #2: Academic Integrity**
- 1.10 - Assignment #1: Syllabus Statement Census [Optional]**

Concept Goals:

If your college does not require a census assignment, you can delete this section from your course.

Concept Content:

Assignment #1: Syllabus Statement Census

Overview

This assignment fulfills your Census requirement.

Objectives

By the end of this assignment, you will:

- Fulfill your Census requirement.

Instructional Materials

- Course syllabus

Instructions

- Complete this assignment by the census date for this course.
- Please **read the course syllabus**.
- Once you have read the syllabus, please create a Word document that states "***I have read and I understand the course syllabus for ISC 112***". When you submit WORD documents please name your file as follows: **ISC112Syllabusstatement(and your name)**.
- Submit this statement with your name as your first assignment. Once members of the class have completed this assignment, you may proceed with **Module Two, OSHA and The Worker's Compensation Act**.

Grading Criteria

The grade for this assignment **is not part of your overall course grade**.



1.11 - Module Wrap-Up Page

Concept Content:

Module Wrap-Up Page

In our first module, we completed some Getting Started activities and introduced ourselves to each other. Please be sure you have completed all of this week's assignments. They are:

- Discussion #1: Introductions
- Quiz #1: Syllabus Scavenger Hunt
- Quiz #2: Academic Integrity
- Assignment #1: Syllabus Statement Census
- Reflection #1: Goals and Expectations

Once you are done with Module 1, you can now move on to the next module. To access it, click on the Modules link, which is located on the left-hand navigation bar, after that date and time.

As always, please feel free to email me with any questions. Have a great week!

BONUS

As we are talking about safety in this course, another thing to consider is first aid. While the following content will not be tested on during the course, it could be a good thing to review just in case.

[First Aid for the Work Place](#) - YouTube Playlist

This is a set of instructional videos regarding basic first aid that could be of use in the workplace. Remember, the emergency services number for the USA is 911. Since the videos come from a UK medical institution, they do reference a different emergency number.

Also, the most important first step when dealing with a work-place injury is to call for medical assistance first. They will be able to help walk you though dealing with a medical emergency.



Module 2: OSHA & Worker's Compensation



2.1 - Module Overview Page

Concept Content:

Module 2: OSHA & Worker's Compensation



Overview

In Module 2, we will learn about The Occupational Safety and Health Act of 1970 and Worker's Compensation. This is important information as knowledge of these concepts can help you learn just what your rights as a worker are in an industrial setting.



Course Objectives

- (A) Interpret the history of OSHA and the OSH Act of 1970 (SLO 1, 2).
- (B) Review an introduction to Worker's Compensation (SLO 1, 2).
- (C) Explore the history and mission of OSHA (SLO 1, 2).
- (D) Identify the development of regulations and standards of the OSH Act (SLO 1, 2).
- (E) Review the responsibilities of employers as it pertains to the OSHA standards (SLO 1, 2).
- (F) Interpret the intent of the General Duty Clause and what qualifies as a hazard (SLO 3).
- (G) Distinguish the history of events leading up to the establishment of the Federal Regulations (SLO 1, 2).
- (H) Examine the history of the safety movement (SLO 1, 2).
- (I) Identify the cost of accidents (SLO 1, 2).
- (J) Understand key terms (SLO 1, 2).
- (K) Become familiar with Worker's Compensation Laws (SLO 2).
- (L) Review a brief history of the Worker's Compensation Act (SLO 2).
- (M) Explore types of injuries compensated under the Act (SLO 2).
- (N) Recognize how Worker's Compensation is a compromise between both employees and employers (SLO 2).
- (O) Calculate a Worker's Compensation claim (SLO 5, 6).



READ

Discussion Schedule

Reading

Time

Outcomes

Due Date

[North Carolina Industrial Commission BULLETIN](#)

[Occupational Safety and Health \(Wikipedia\)](#)

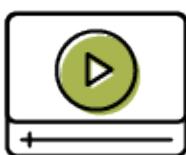
[The Health and Safety Movement](#)

[North Carolina Industrial Commission Bulletin](#)

[McDonald's Case Video Transcript](#)

[Legal Comments about the McDonald's Case](#)

| | | |
|--|------------|--|
| | 20 minutes | <ul style="list-style-type: none">• (A) Explore Machine Safe-guarding and the Lock Out, Tag Out procedure to control energy (SLO 1, 2, 3).• (B) Assess a piece of equipment to determine risk (SLO 3).•• (C) Identify which equipment parts need to be guarded (SLO 3).• (K) Explore Machine Safe-guarding and the Lock Out, Tag Out procedure to control energy (SLO 1, 2, 3).• (L) Assess a piece of equipment to determine risk (SLO 3).•• (M) Identify which equipment parts need to be guarded (SLO 3). |
| | 15 minutes | <ul style="list-style-type: none">• (K) Become familiar with Worker's Compensation Laws (SLO 2).• (L) Review a brief history of the Worker's Compensation Act (SLO 2).• (M) Explore types of injuries compensated under the Act (SLO 2).• (N) Recognize how Worker's Compensation is a compromise between both employees and employers (SLO 2).• (K) Become familiar with Worker's Compensation Laws (SLO 2).• (M) Explore types of injuries compensated under the Act (SLO 2).• (N) Recognize how Worker's Compensation is a compromise between both employees and employers (SLO 2).• (K) Become familiar with Worker's Compensation Laws (SLO 2).• (M) Explore types of injuries compensated under the Act (SLO 2).• (N) Recognize how Worker's Compensation is a compromise between both employees and employers (SLO 2). |
| | 10 minutes | <ul style="list-style-type: none">• (K) Become familiar with Worker's Compensation Laws (SLO 2).• (L) Review a brief history of the Worker's Compensation Act (SLO 2).• (M) Explore types of injuries compensated under the Act (SLO 2).• (N) Recognize how Worker's Compensation is a compromise between both employees and employers (SLO 2). |
| | 15 Minutes | <ul style="list-style-type: none">• (K) Become familiar with Worker's Compensation Laws (SLO 2).• (M) Explore types of injuries compensated under the Act (SLO 2).• (N) Recognize how Worker's Compensation is a compromise between both employees and employers (SLO 2). |
| | 15 Minutes | <ul style="list-style-type: none">• (K) Become familiar with Worker's Compensation Laws (SLO 2).• (M) Explore types of injuries compensated under the Act (SLO 2).• (N) Recognize how Worker's Compensation is a compromise between both employees and employers (SLO 2). |



WATCH

Discussion Schedule

| Video/PowerPoint | Time | Outcomes | Due Date |
|-------------------------|-------------|-----------------|-----------------|
|-------------------------|-------------|-----------------|-----------------|

Occupational Safety and Health Act

Video Link:

<https://www.youtube.com/embed/cB9W1yigWyc>

2:10 minutes

- (A) Explore Machine Safe-guarding and the Lock Out, Tag Out procedure to control energy (SLO 1, 2, 3).
- (B) Assess a piece of equipment to determine risk (SLO 3).
- (C) Identify which equipment parts need to be guarded (SLO 3).

Workplace Health and Safety History WWII to OSHA

Video Link:

<https://www.youtube.com/embed/kc-ivXUp6ns>

2:46 minutes

- Interpret the procedure for Lock-Out, Tag-Out.

Can't Take No More 1980 Occupational Health and Safety Administration (OSHA)

Video Link:

<https://www.youtube.com/embed/13gzGkQtVzg>

29 minutes

- (A) Interpret the history of OSHA and the OSHAct of 1970.
- (C) Explore the history and mission of OSHA.
- (D) Identify the development of regulations and standards of the OSHAct.
- (E) Review the responsibilities of employers as it pertains to the OSHA standards.

Worker's Comp PowerPoint

15 Minutes

- (K) Become familiar with Worker's Compensation Laws (SLO 2).
- (L) Review a brief history of the Worker's Compensation Act (SLO 2).
- (M) Explore types of injuries compensated under the Act (SLO 2).
- (N) Recognize how Worker's Compensation is a compromise between both employees and employers (SLO 2).

[Worker's Comp Lawsuit](#)

Video Link:

<https://www.youtube.com/embed/rwhw-Inj0k>

3 Minutes

- (K) Become familiar with Worker's Compensation Laws (SLO 2).
- (M) Explore types of injuries compensated under the Act (SLO 2).
- (N) Recognize how Worker's Compensation is a compromise between both employees and employers (SLO 2).



DISCUSS

| Activity |
|---|
| Reflection #2: Pause, Reflect, Question |
| Discussion #2 |

Discussion Schedule

| Time | Outcomes | Due Date |
|-------------|---|-----------------|
| 15 minutes | • Reflect on module resources | October 2 |
| 15 minutes | • Reflect on overall learning in module | October 2 |



Assignments

| Activity | Time |
|--|-------------|
| Assignment #2: Introduction to OSHA Video | 30 minutes |
| Assignment #3: Federal Laws that Improved Workplace Safety | |

Assignment Schedule

| Activity | Time | Outcomes | Due Date |
|--|-------------|--|-----------------|
| Assignment #2: Introduction to OSHA Video | 30 minutes | <ul style="list-style-type: none">• (A) Explore Machine Safe-guarding and the Lock Out, Tag Out procedure to control energy (SLO 1, 2, 3).• (B) Assess a piece of equipment to determine risk (SLO 3).• (C) Identify which equipment parts need to be guarded (SLO 3).• (G) Distinguish the history of events leading up to the establishment of the Federal Regulations.• (H) Examine the history of the safety movement. | October 2 |
| Assignment #3: Federal Laws that Improved Workplace Safety | | | |



QUIZ/TEST

Quiz Schedule

| Activity | Time | Outcomes | Due Date |
|---|--------|---|-------------|
| Quiz #3: Occupational Safety and Health Act of 1971 | 1 Hour | <ul style="list-style-type: none">• Explore the background and procedures for the new form.• Interpret the timeline and requirements under OSHA for the new form.• Determine how to decipher important health and safety information on Sodium Hydroxide using the new form.• Differentiate who has responsibility for elements of the HAZ COM Standard. | September 4 |
| Quiz #4: The Health and Safety Movement | 1 Hour | | |



WRAP-UP

In Module 2, we learned about OSHA and Worker's Compensation. We continue our learning in Module 3 with [insert module 3 here].

- ✓ **Part 1: The Occupational Safety and Health Act of 1971**
- ✓ **2.2 - Curriculum & Content Resource Page**

Concept Content:

Curriculum & Content

Approximate time to complete all requirements: 1 Hour.

In Module 2, you will explore the history and mission of OSHA.

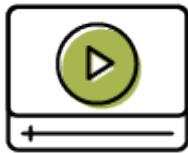
In this module, you will:

- Read the document on the OSHAct.
- View the Video, Introduction to OSHA



Readings

- [Occupational Safety and Health](#)



Lectures

- [Introduction to OSHA](#)

Video Link: <https://www.youtube.com/embed/AlX-qKWuYxM>



2.3 - Assignment #2: Introduction to OSHA Video

Concept Content:

Assignment #2: Introduction to OSHA Video

Overview

This video discusses OSHA—how and why it was created, when it began, and what they do. The video is designed to assist you in complying with OSHA regulations.

Objectives

By the end of this assignment, you will be able to:

- Interpret the history of OSHA and the OSHAct of 1970.

Instructional Materials

1. Video (the file is available closed captioned if you prefer to read the text).

Video Link: <https://www.youtube.com/embed/H6wRRWi6i0c>

Instructions

- Please list five (5) facts from the video that you did not know before you viewed the video.
- Submit this assignment as a Word document.
- Please remember to name your file **ISC112IntroOSHAyourname** (for example **ISC112IntroOSHAMoore**)

Grading Criteria

This assignment is worth 100 points.

 **2.4 - Quiz #3: Occupational Safety and Health Act of 1971**

 **Part 2: OSHA & Worker's Compensation**

 **2.5 - Curriculum & Content Resource Page**

Concept Content:

Curriculum & Content

Approximate time to complete readings: 1.5 Hours.

In this section, we will cover the Introduction to The Occupational Safety and Health Act of 1970 and Worker's Compensation.

In this section, you will:

1. View the Power Point Presentations for the Occupational Safety and Health Administration of 1970
2. Read the Bulletin from The North Carolina Industrial Commission about Worker's Compensation.
3. Pay special attention to pages 3 through 11.



Readings

- [North Carolina Industrial Commission Bulletin](#)



Lectures

- [The Occupational Health and Safety Act of 1970 \(PowerPoint\)](#)

 **Part 3: History of OSHA**

 **2.6 - Curriculum & Content Resource**

Concept Content:

Curriculum & Content

Approximate time to complete all requirements: 1 Hour

In this section, we will examine the history of the safety movement, identify the cost of accidents, as well as learn key safety terms.

In this section, you will:

- Read the Health and Safety Movement document.
- Watch the video on the Hawks Nest Tunnel Tragedy (You may have driven through this tunnel in West Virginia).
- Watch the brief video on the Health and Safety movement.



Readings

- [The Health and Safety Movement](#)



Lectures

- [**Can't Take No More: 1980 Occupational Safety and Health Administration \(OSHA\) Hawk's Nest Tunnel**](#)

Video Link: [/www.youtube.com/embed/PRR457xirTM](https://www.youtube.com/embed/PRR457xirTM)



2.7 - Assignment #3: Federal Laws that Improved Workplace Safety

Concept Content:

Assignment #3: Federal Laws that Improved Workplace Safety

Overview

In this assignment, we will examine the history of the safety movement.

Objectives

- Examine the history of the safety movement.

Instructional Materials

1. Reading list
2. Videos

Instructions

Write one paragraph on the following topic:

- What Federal Laws were enacted to improve the safety of American Workers?

Grading Criteria

This assignment is worth 100 points.

- ✓ **2.8 - Quiz #4: The Health and Safety Movement**
- ✓ **2.9 Worker's Compensation**
- ✓ **2.10 - Curriculum & Content Resource**

Concept Content:

Curriculum & Content

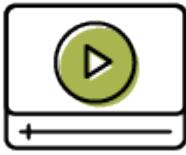
Approximate time to complete all requirements: 1 Hour.

In this section, you will become familiar with Workers' Compensation Laws, why we have such laws, who administers compensation and how both employee and employer benefit and/or not benefit from Workers' Compensation. Before you begin working on the case study assignment in this module, lets take a look at some resources to get you thinking about how Workers' Compensation applies, or does not apply to the situation!



Readings

- [North Carolina Industrial Commission Bulletin](#)
- [McDonald's Case Video Transcript](#)
- [Legal Comments about the McDonald's Case](#)



Lectures

- [Worker's Comp PowerPoint](#)
- [Worker's Comp Lawsuit](#)

Video Link: <https://www.youtube.com/embed/rwhw-Inji0k>

2.11 Assignment 4: Case Study #1 Calculate a Worker's Compensation Claim

Concept Content:

Assignment #4: Case Study #1

Overview

In this assignment, you will view a video about a workplace injury that occurred at McDonald's. The YouTube case study, along with the video transcript, and a legal explanation of the outcomes of the compensation claim come from a Worker's Compensation Lawyer!

Teaser: What major Worker's Compensation language comes into play here? Hint! See page 4 of the North Carolina Industrial Commission Bulletin:

"All injuries must arise out of and in the course and scope of the covered employment to be compensable."

Objectives

- Become familiar with Worker's Compensation Laws.
- Explore types of injuries compensated under the Act.
- Calculate a Worker's Compensation claim.

Instructions

- Please review the following case study and answer the ensuing questions. (Review the resources in the Curriculum & Content Resources to aid in completing this assignment.)
- Copy and paste the questions and answers into a Word document to submit.

Worker's Compensation Case Study

Sam Thompson works for the Moore and Smith fabric production facility in High Point. He works with a friend, Jack Chastain. They are both on the production floor and their job description is to roll the newly woven fabrics on to rollers to ship.

The fabric is laid out on a large rolling table with tacks along each side to catch and stretch the selvage. At the end of the table are two selvage cutters that trim the fabric selvage. This creates a more pleasing roll of fabric for the consumer.

At the end of the day, Sam is rolling fabric while Jack cuts on the cutters. Sam's right hand is injured and he loses his Thumb AND First or index finger. It is determined that he has a Permanent Partial Disability (total loss). Sam makes 360.00 a week at Moore and Smith.

Questions:

Please answer the following: (copy and paste the two questions to a new document and submit)

- Can Sam sue Jack for this injury? Why or Why not?
- What is Sam's total compensation for this injury?

Grading Criteria

This assignment is worth 100 points.



2.12 - Reflection #2: Pause, Reflect, Question [Optional Section]

Concept Content:

Pause, Reflect, Question

Instructions

Now that you have completed the content portion of this module and have read the instructions for your assignments, it is time to reflect on what you have learned so far. Before launching into your assignment(s), what questions remain?

Here are some questions to ask yourself to help you reflect on your learning:

- What new concepts really resonate with you?
- What new concepts remain cloudy or unclear?
- What practical questions do you have about the upcoming assignment?



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You get 30 point(s) for posting a reflection or question(s). I will join the discussion to clarify questions and answers.



2.13 - Discussion #2 [Optional Section]

Concept Content:

Discussion #2

Purpose of the Discussion

This discussion provides you an opportunity to further reflect on OSHA and Worker's Compensation. It offers you the room to explore topics, issues, and questions.

Learning Objectives

- Reflect on overall learning in module

Directions

Create a post with an answer to the following questions.

Part 1- Respond to the following prompts:

- Choose one of your answers to Reflection #2 and post it to the discussion below.

Part 2 - Responding to Posts

- Respond to two (2) peers posts commenting on the similarities and differences of your posts.

Part 3 - Response to peer response to original post.

- Respond to at least one of your peer's responses to your original post.

Grading Criteria

This assignment is worth 10 points.



2.14 - Module Wrap-Up Page

Concept Content:

Module Wrap-Up Page

In Module 2, we learned about the history of the Occupational Safety and Health Act of 1970 and Worker's Compensation. We learned that the mission of OSHA is to assure safe and healthful workplaces by setting and enforcing standards, and by providing training, outreach, education and assistance. We also learned that employers must comply with all applicable OSHA standards. We are beginning to develop a vocabulary of safety terms and understand some of the reasons that the Health and Safety Movement began. We are also beginning to understand that safety in the workplace is an economic issue as well as a moral issue. We continue our learning in Module 3 with a deeper study of Worker's Compensation.

Please be sure you have completed all of this week's assignments. They are:

- Assignment #2: Introduction to OSHA Video
- Quiz #3: Occupational Safety and Health Act of 1971
- Assignment #3: Federal Laws that Improved Workplace Safety
- Quiz #4: The Health and Safety Movement
- Assignment #4: Case Study #1: Calculate a Worker's Compensation Claim
- Reflection #2: Pause, Reflect, Question
- Discussion #2

Once you are done with Module 1, you can now move on to the next module. To access it, click on the Modules link, which is located on the left-hand navigation bar, after that date and time.

As always, please feel free to email me with any questions. Have a great week!

Module 3: Lock Out, Tag Out Procedures



3.1 - Module Overview Page

Concept Content:

Module 3: Lockout/Tagout Procedures



Overview

In Module 3, you will become familiar with Lock Out, Tag Out procedures. During this module we will cover the need for energy control procedures, lockout/tagout methods, employer and employee responsibilities, and what can happen if lockout/tagout procedures are ignored.



Module Objectives

At the end of this module, you will be able to:

- (A) Become familiar with Lock Out, Tag Out procedures. (SLO 3)
- (B) Understand why Lock Out, Tag Out procedures are important for industrial safety. (SLO 3)

Module Items to Complete



READ

Discussion Schedule

[Lock Out, Tag Out PowerPoint](#)

| Reading | Time | Outcomes | Due Date |
|----------------|-------------|--|-----------------|
| | 40 Minutes | <ul style="list-style-type: none">• (A) Become familiar with Lock Out, Tag Out procedures. (SLO 3)• (B) Understand why Lock Out, Tag Out procedures are important for industrial safety. (SLO 3)• | |





DISCUSS

Discussion Schedule

| Activity | Time | Outcomes | Due Date |
|--|------|----------|----------|
| Reflection #3: Pause, Reflect, Question 15 Minutes • Reflect on Module resources | | | |



QUIZ/TEST

Quiz Schedule

| Activity | Time | Outcomes | Due Date |
|-------------------------|------------|---|----------|
| Quiz #5: Lockout/Tagout | 10 Minutes | <ul style="list-style-type: none">• A) Become familiar with Worker's Compensation Laws (SLO 2).• (B) Review a brief history of the Worker's Compensation Act (SLO 2).• (C) Explore types of injuries compensated under the Act (SLO 2).• (D) Recognize how Worker's Compensation is a compromise between both employees and employers (SLO 2). | |



WRAP-UP

In Module 3, we became familiar with lockout/tagout and why it is important in terms of employee safety.

3.2 - Curriculum & Content Resource

Concept Content:

Curriculum & Content

Approximate time to complete all requirements: 46 Minutes

In Module 3, you will become familiar with Lock Out, Tag Out procedures. During this module we will cover the need for energy control procedures, lockout/tagout methods, employer and employee responsibilities, and what can happen if lockout/tagout procedures are ignored.



Lectures

- [Lockout/Tagout Powerpoint - 63 Sides](#)



3.3 - Quiz #5 Lockout/Tagout

Concept Content:

This week's quiz is located in the assignments tab. It is 7 questions.



3.5 - Reflection #3: Pause, Reflect, Question [Optional Section]

Concept Content:

Pause, Reflect, Question

Instructions

Now that you have completed the content portion of this module and have read the instructions for your assignments, it is time to reflect on what you have learned so far. Before launching into your assignment(s), what questions remain?

Here are some questions to ask yourself to help you reflect on your learning:

- What new concepts really resonate with you?
- What new concepts remain cloudy or unclear?
- What practical questions do you have about the upcoming assignment?



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You get 30 point(s) for posting a reflection or question(s). I will join the discussion to clarify questions and answers.



3.6 - Discussion #3 [Optional Section]

Concept Content:

Discussion #3

Purpose of the Discussion

This discussion provides you an opportunity to further reflect on Lockout/Tagout. It offers you the room to explore topics, issues, and questions.

Learning Objectives

- Reflect on overall learning in module.

Directions

Create a post with an answer to the following questions.

Part 1- Respond to the following prompts:

- Choose one of your answers to Reflection #3 and post it to the discussion below.

Part 2 - Responding to Posts

- Respond to two (2) peers posts commenting on the similarities and differences of your posts.

Part 3 - Response to peer response to original post.

- Respond to at least one of your peer's responses to your original post.

Grading Criteria

This assignment is worth 10 points.



3.7 - Module Wrap-Up Page

Concept Content:

Module Wrap-Up Page

In Module 3, we became familiar with Workers' Compensation Laws, why we have such laws, who administers compensation, and how both employee and employer benefit and/or not benefit from Workers' Compensation.

Please be sure you have completed all of this week's assignments. They are:

- Quiz #5: Lockout/Tagout
- Reflection #3: Pause, Reflect, Question
- Discussion #3

Once you are done with Module 3, you can now move on to the next module. To access it, click on the Modules link, which is located on the left-hand navigation bar, after that date and time.

As always, please feel free to email me with any questions. Have a great week!



Module 4: The Hazard Communication Standard



4.1 - Module Overview Page

Concept Content:

Module 4: The Hazard Communication Standard



Overview

Overview

To understand chemicals in the workplace (and the home) you must first understand the history leading up to the Hazard Communication Standard, the development of The Community Right to Know Act, what a SDS is, and how to read it. This knowledge is necessary in order to work in an industrial setting.



Learning Objectives

Module Objectives

At the end of this module, you will be able to:

- (A) Understand chemicals in the workplace (SLO 2,3).
- (B) Explore the history of the Hazard Communication Standard (SLO 1,2).
- (C) Review the development of the Community Right to Know Act (SLO 1).
- (D) Understand what a MSDS is and how to read it (SLO 1).
- (E) Explore a local issue with industrial waste (SLO 5).
- (F) Review who is responsible for the development of MSDS (SLO 1, 2).
- (G) Explore what information is contained in the MSDS (SLO 1, 2, 3).



READ

Discussion Schedule

Reading

Time

Outcomes

Due Date

[Comments about the Bhopal Disaster](#)

15 minutes

- Interpret the history of OSHA and the OSHAct of 1970.
- Explore the history and mission of OSHA.
- Identify the development of regulations and standards of the OSHAct.

[Department of Labor Poster Material Safety Data Sheets \(OSHA\)](#)

15 minutes

- Review the development of the Community Right to Know Act.
- Explore what information is contained in the MSDS.

[Tar Heel Missile Plant Contamination \(NC Policy Watch\)](#)

45 minutes

- Explore a local issue with industrial waste.



WATCH

| Discussion Schedule | | | |
|--|------------|---|--------------|
| Video/PowerPoints | Time | Outcomes | Due Date |
| Hazard Communication Standard PowerPoint | 15 minutes | <ul style="list-style-type: none"> • Understand chemicals in the workplace. • Explore the history of the Hazard Communication Standard. • Understand what a MSDS is and how to read it. • Understand chemicals in the workplace | September 11 |
| The Bhopal India Disaster Video Link: https://www.youtube.com/embed/FdyBy2s9I5c | 13 minutes | <ul style="list-style-type: none"> • Explore the history of the Hazard Communication Standard | September 11 |
| <u>Emergency Planning and Community Right-To-Know Act</u> | 3 minutes | <ul style="list-style-type: none"> • Review the development of the Community Right to Know Act. | September 11 |
| Video Link: https://www.youtube.com/embed/lkXTXjXeyHw | 15 minutes | <ul style="list-style-type: none"> • Explore what information is contained in the MSDS. | |
| SDS PowerPoint | | | |



DISCUSS

| Discussion Schedule | | | |
|---|------------|---|-----------|
| Activity | Time | Outcomes | Due Date |
| Reflection #4: Pause, Reflect, Question | 15 minutes | <ul style="list-style-type: none"> • Reflect on module resources | August 28 |
| Discussion #4 | 15 minutes | <ul style="list-style-type: none"> • Reflect on overall learning in module | August 28 |



Assignments

| Assignment Schedule | | | |
|--|------------|---|----------|
| Activity | Time | Outcomes | Due Date |
| Assignment #5: Home Chemical Inventory | 30 minutes | • Understand what a MSDS is and how to read it. | |
| Assignment #7: Tar Heel Missile Plant | 30 minutes | • Explore a local issue with industrial waste. | |



WRAP-UP

In Module 4, we learned about chemicals in the workplace (and the home) and that we must first understand the history leading up to the Hazard Communication Standard, the development of The Community Right to Know Act, what a MSDS is, and how to read it. We continue our learning in Module 5 with Material Safety Data Sheets and Chemical Inventory.

4.2 - Curriculum & Content Resource

Concept Content:

Curriculum & Content

Approximate time to complete all requirements: 2 Hours

To understand chemicals in the workplace (and the home) you must first understand the history leading up to the Hazard Communication Standard, the development of The Community Right to Know Act, what a MSDS is, and how to read it.

In the 1940s the Manufacturing Chemists' Association, now known as the Chemical Manufacturers Association (CMA), began producing "Chemical Safety Data Sheets" containing "Properties and Essential Information for Safe Handling and Use" of some of the more important hazardous chemicals used in commerce. Ultimately, about 100 of these Data Sheets were produced. They were very detailed in their coverage of each chemical, to the point of being almost a stand-alone book on the product. The longest Data Sheet was 46 pages. Later, some chemical companies began to produce data sheets for some of their high volume or hazardous chemicals. CMA no longer produces or supports the "Chemical Safety Data Sheets." After the Hazard Communication Standard was developed (as a result of the Bopahl incident), every hazardous chemical in the workplace must have an Material Safety Data Sheet (MSDS, now referred to as Safety Data Sheet or SDS), **which is accessible to every employee who works with that chemical.**

As you begin to look at MSDS, notice that they all have a similar look and are required to have

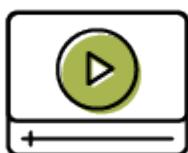
information in several categories. As of 2015, the MSDS format moved to one page and is referred to as SDS. The name and format became more simple. The Chemical manufacturer is responsible for developing the SDS and shipping it with the product. The employer is responsible for making the MSDS available to the worker who handles the chemical.

In this Module, you will also learn about a local issue with industrial waste, contamination at the former Tar Heel Army Missile Plant in Burlington. This is a very good example of what happens when industrial waste is dumped down the drain or chemicals are spilled, leaked and seep into ground water.



Readings

- [Comments about the Bhopal Disaster](#)
- [Department of Labor Poster](#)
- [Material Safety Data Sheets \(OSHA\)](#)
- [Tar Heel Missile Plant Contamination \(NC Policy Watch\)](#)
- [The New SDS Form: What you Need to Know](#)
- [HAZ COM Information about the New SDS Form](#)



Lectures

- [Hazard Communication Standard PowerPoint](#)
- [The Bhopal India Disaster](#)
- [SDS PowerPoint](#)

Video Link: <https://www.youtube.com/embed/FdyBy2s9I5c>

• **Emergency Planning and Community Right-To-Know Act**

Video Link: <https://www.youtube.com/embed/lkXTXjXeyHw>

[Hazardous Chemical HAZCOM and MSDS \(PowerPoint\)](#)



4.3 - Assignment #5: Home Chemical Inventory

Concept Content:

Assignment #5: Home Chemical Inventory

Overview

To comply with the HAZ COM standard, a business would begin with a chemical inventory. They would make a list of every chemical that had a health hazard or a physical hazard (if it's a fire or explosion hazard or it will have a negative physical effect like inhalation or burn the skin). In this assignment, you will find chemicals that fit that description and list them in your home chemical inventory.

Objectives

- Understand what a MSDS is and how to read it.
- Understand chemicals in the workplace.

Instructional Materials

1. Reading list
2. Videos

Instructions

- Look around your home and find FOUR chemicals that fit the description of a health hazard or a physical and list them in the inventory below.
- Copy/paste the form into a document and fill it in.
- Fill in as much of the form as possible and submit it to this assignment link. Please submit document as a PDF.

At Home Hazardous Chemical Inventory

Inventory document located in the resources tab for this section. Download the word document and re-upload it to the assignment tab.

Grading Criteria

This assignment is worth 100 points.



4.4 - Assignment #6: Tar Heel Missile Plant

Concept Goals:

Assignment #7: Tar Heel Missile Plant

Overview

In this assignment, you will explore a local issue with groundwater contamination from the Tar Heel Army Missile Plant in Burlington, NC and the importance of chemical handling and disposal.

Objectives

- Explore a local issue with industrial waste.

Instructions

For this assignment, answer the following questions about the Tar Heel Missile Plant disaster. To complete this assignment, copy and paste the following questions into a document.

1. Why was the site, once it was contaminated, kept off of the Superfund List.
2. Why is being on the **Superfund List** important for a contaminated property such as this?
3. What is the relationship of Superfund sites to low income neighborhoods?
4. Was a Superfund Score available for the Tar Heel Missile site?
5. Under what conditions was the Army allowed to sell the property?
6. Why would the current owner (Tsui) of the property apply for the **Brownfield Program**?

Upload your document to the assignments tab under quizzes.

Grading Criteria

This assignment is worth 100 points.



4.5 - Module 4 Quiz



4.6 - Reflection #4: Pause, Reflect, Question [Optional Section]

Concept Content:

Pause, Reflect, Question

Instructions

Now that you have completed the content portion of this module and have read the instructions for your assignments, it is time to reflect on what you have learned so far. Before launching into your assignment(s), what questions remain?

Here are some questions to ask yourself to help you reflect on your learning:

- What new concepts really resonate with you?
- What new concepts remain cloudy or unclear?
- What practical questions do you have about the upcoming assignment?



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You get 30 point(s) for posting a reflection or question(s). I will join the discussion to clarify questions and answers.



4.7 - Discussion #4 [Optional Section]

Concept Content:

Discussion #4

Purpose of the Discussion

This discussion provides you an opportunity to further reflect on The Hazard Communication Standard. It offers you the room to explore topics, issues, and questions.

Learning Objectives

- Reflect on overall learning in module.

Directions

Create a post with an answer to the following questions.

Part 1- Respond to the following prompts:

- Choose one of your answers to Reflection #4 and post it to the discussion below.

Part 2 - Responding to Posts

- Respond to two (2) peers posts commenting on the similarities and differences of your posts.

Part 3 - Response to peer response to original post.

- Respond to at least one of your peer's responses to your original post.

Grading Criteria

This assignment is worth 10 points.



4.8 - Module Wrap-Up Page

Concept Content:

Module Wrap-Up Page

In Module 4, we learned about chemicals in the workplace (and the home) and how you must first understand the history leading up to the Hazard Communication Standard, the development of The Community Right to Know Act, what a MSDS is, and how to read it.

Please be sure you have completed all of this week's assignments. They are:

- Assignment #5: Home Chemical Inventory
- Assignment #6: Tar Heel Missile Plant
- Reflection #4: Pause, Reflect, Question
- Discussion #4

Once you are done with Module 4, you can now move on to the next module. To access it, click on the Modules link, which is located on the left-hand navigation bar, after that date and time.

As always, please feel free to email me with any questions. Have a great week!



Module 5: Industrial Hygiene



5.1 - Module Overview Page

Concept Content:

Module 5: Industrial Hygiene



Overview

Overview

In Module 5, you will learn about Industrial Hygiene. In the workplace there are many potential hazards that can lead to injury, illness, or even death. It is important to know how to navigate and mitigate these hazards for your safety. This section will go over proper hygiene practices in industry, and the various types of hazards one might encounter in the workplace, including bloodborne pathogens.



Learning Objectives

Module Objectives

At the end of this module, you will be able to:

- Identify common workplace health hazards (SLO 3)
- Know how to mitigate common workplace health hazards (SLO 3)
- Recognize and mitigate the dangers of bloodborne pathogens (SLO 3)



WATCH

Discussion Schedule

| Video/PowerPoints | Time | Outcomes | Due Date |
|---|------------|---|----------|
| Industrial Hygiene PowerPoint | 1 Hour | <ul style="list-style-type: none">• Identify common workplace health hazards (SLO 3)• Know how to mitigate common workplace health hazards (SLO 3) | |
| Bloodborne Pathogens PowerPoint | 30 Minutes | <ul style="list-style-type: none">• Recognize and mitigate the dangers of bloodborne pathogens (SLO 3) | |



DISCUSS

Discussion Schedule

| Activity | Time | Outcomes | Due Date |
|---|------------|---|--------------|
| Reflection #5: Pause, Reflect, Question | 15 minutes | <ul style="list-style-type: none">• Reflect on module resources | September 18 |

**QUIZ/TEST**

| Quiz Schedule | | | |
|-----------------------------|------------|--|--------------|
| Activity | Time | Outcomes | Due Date |
| Quiz #6: Industrial Hygiene | 18 minutes | <ul style="list-style-type: none">• Review the causes of workplace health hazards.• Review the dangers of bloodborne pathogens. | September 18 |

**WRAP-UP**

In Module 5, we learned about Industrial Hygiene and Bloodborne Pathogens. Next week we will go into our module on Personal Protective Equipment (PPE).

 **5.2 - Curriculum & Content Resource****Concept Content:****Curriculum & Content**

Approximate time to complete all requirements: 2 Hours.

Everyday we are exposed to a variety of potential hazards in the workplace. These hazards can cause injury, disability, or even death in extreme cases. It is important to be able to identify and mitigate these hazards to prevent these negative outcomes. We will go over the various types of hazards, how to mitigate them, and general safety tips.

**Lectures**

- [Industrial Hygiene PowerPoint](#)
- [Bloodborne Pathogens PowerPoint](#)



5.3 Module Assessment/Assignment

Concept Content:

This week's quiz is located in the assignments tab. It is 12 questions.



5.4 - Reflection #5: Pause, Reflect, Question [Optional Section]

Concept Content:

Pause, Reflect, Question

Instructions

Now that you have completed the content portion of this module and have read the instructions for your assignments, it is time to reflect on what you have learned so far. Before launching into your assignment(s), what questions remain?

Here are some questions to ask yourself to help you reflect on your learning:

- What new concepts really resonate with you?
- What new concepts remain cloudy or unclear?
- What practical questions do you have about the upcoming assignment?



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You get 30 point(s) for posting a reflection or question(s). I will join the discussion to clarify questions and answers.



5.5 - Discussion #5 [Optional Section]

Concept Content:

Discussion #5

Purpose of the Discussion

This discussion provides you an opportunity to further reflect on Industrial Hygiene and Bloodborne pathogens.

Learning Objectives

- Reflect on overall learning in module.

Directions

Create a post with an answer to the following questions.

Part 1- Respond to the following prompts:

- Choose one of your answers to Reflection #5 and post it to the discussion below.

Part 2 - Responding to Posts

- Respond to two (2) peers posts commenting on the similarities and differences of your posts.

Part 3 - Response to peer response to original post.

- Respond to at least one of your peer's responses to your original post.

Grading Criteria

This assignment is worth 10 points.



5.6 - Module Wrap-Up Page

Concept Content:

Module Wrap-Up Page

In Module 5, we learned about Industrial Hygiene and Bloodborne pathogens.

Please be sure you have completed all of this week's assignments. They are:

- Quiz 6: Industrial Hygiene and Bloodborne Pathogens
- Reflection #5: Pause, Reflect, Question
- Discussion #5

Once you are done with Module 5, you can now move on to the next module. To access it, click on the Modules link, which is located on the left-hand navigation bar, after that date and time.

As always, please feel free to email me with any questions. Have a great week!



Module 6: PPE



6.1 - Module Overview Page

Concept Content:

Module 6: PPE



Overview

In Module 6, we will learn about Safety Data Sheets (SDS) and Personal Protective Equipment and Clothing (PPE). OSHA developed a new Material Safety Data Sheet in 2015. This new form is known as the GHS Safety Data Sheet and is a component of the Globally Harmonized System of Classification and labeling of Chemicals (GHS). The new form replaces the older, less efficient form, the MSDS. A new form was needed as economies have become more global, it has become more common for chemicals to be shipped from all over the world. Since chemicals are a big part of our lives, the need for a common communication of chemical properties, their safety and effects, the first aid and the precautions that need to be taken when shipping and handling chemicals has become vital.

We will also begin to learn about the General Industry Standard. Standards are developed based on accident history and are actually laws. In each following module, we will look at a new standard and how that standard is developed and the responsibility of both the employee and employer to follow the standard.



Module Objectives

At the end of this module, you will be able to:

- (A) Analyze how to select and properly wear eye protection (SLO 3).
- (B) Determine how to select and wear the best head protection (SLO 3).
- (C) Explore the benefits of the use of personal protective clothing and equipment (SLO 3).



READ

Discussion Schedule

| Reading | Time | Outcomes | Due Date |
|---|-------------|---|-----------------|
| <u>OSHA publication for PPE</u> | 30 minutes | <ul style="list-style-type: none">• (A) Analyze how to select and properly wear eye protection.• (B) Determine how to select and wear the best head protection.• (C) Explore the benefits of the use of personal protective clothing and equipment. | |

[PPE Eye and Head Protection Checklist](#)

| | | |
|---------------------------------------|------------|---|
| | 10 minutes | <ul style="list-style-type: none">• (A) Analyze how to select and properly wear eye protection.• (B) Determine how to select and wear the best head protection.• (C) Explore the benefits of the use of personal protective clothing and equipment. |
| <u>PPE PowerPoint</u> | 30 Minutes | <ul style="list-style-type: none">• (A) Analyze how to select and properly wear eye protection.• (B) Determine how to select and wear the best head protection.• (C) Explore the benefits of the use of personal protective clothing and equipment. |



WATCH

Discussion Schedule

| Video/PowerPoint | Time | Outcomes | Due Date |
|--|-------------|--|-----------------|
| <u>PPE Eye Protection (YouTube)</u> Video Link: https://www.youtube.com/embed/0DYgLJWzYqk | 6 minutes | <ul style="list-style-type: none">• (E) Analyze how to select and properly wear eye protection.• (G) Explore the benefits of the use of personal protective clothing and equipment (SLO 3). | September 25 |
| <u>Types of Respirators (YouTube)</u> Video Link: https://www.youtube.com/embed/cMYOFbGvG58 | 16 minutes | <ul style="list-style-type: none">• (E) Analyze how to select and properly wear eye protection.• (G) Explore the benefits of the use of personal protective clothing and equipment (SLO 3). | September 25 |



DISCUSS

Discussion Schedule

| Activity | Time | Outcomes | Due Date |
|---|-------------|---|-----------------|
| Reflection #6: Pause, Reflect, Question | 15 minutes | <ul style="list-style-type: none">• Reflect on module resources | September 25 |
| Discussion #6 | 15 minutes | <ul style="list-style-type: none">• Reflect on overall learning in module | September 25 |



Assignments

Assignment Schedule

| Activity | Time | Outcomes | Due Date |
|-------------------------------------|------|---|--------------|
| Assignment #8: Case Study 1 Hour #2 | | <ul style="list-style-type: none"> • (E) Analyze how to select and properly wear eye protection. • (F) Determine how to select and wear the best head protection. • (G) Explore the benefits of the use of personal protective clothing and equipment. | September 25 |



QUIZ/TEST

Quiz Schedule

| Activity | Time | Outcomes | Due Date |
|--------------------------------------|--------|--|--------------|
| Quiz #7: SDS | 1 Hour | <ul style="list-style-type: none"> • Review the Department of Labor Statistics for North Carolina workplace fatalities. • Understand the high fatality rate from slip trip and fall accidents. • Determine prevention of those hazards. | September 25 |
| Quiz #8: HAZ COM & Chemical Exposure | 1 Hour | <ul style="list-style-type: none"> • (C) Determine how to decipher important health and safety information on Sodium Hydroxide using the new form. • (D) Differentiate who has responsibility for elements of the HAZ COM Standard. | September 25 |



WRAP-UP

In Module 6, we learned about Safety Data Sheets and Personal Protective Equipment and Clothing. We continue our learning in Module 7 with Machine Safeguarding.



6.2 Content & Curriculum Resource Page

Concept Content:

This week's content:

Reading:

[OSHA publication for PPE](#)

[PPE Eye and Head Protection Checklist](#)

Videos:

[PPE Eye Protection \(YouTube\)](#)

[Types of Respirators \(YouTube\)](#)



6.3 - Assignment #8: Case Study #2 PPE Eye and Head Protection for Welders

Concept Content:

Assignment #8: Case Study #2

Overview

In this assignment, you will use the PPE checklist for eye and head protection to determine the proper safety protection for a construction welder.

Objectives

- Analyze how to select and properly wear eye protection.
- Determine how to select and wear the best head protection.
- Explore the benefits of the use of personal protective clothing and equipment.

Instructional Materials

1. Reading list
2. Videos

Instructions

- Please review the following case study and answer the ensuing questions. (Review the resources in the Curriculum & Content Resources to aid in completing this assignment.)
- Copy and paste the questions and answers into a Word document to submit.

PPE Eye and Head Protection for Welders

Randy Small is a construction welder with the AtoZ Welding Company. He will spend about three months in downtown Raleigh building the addition to the Convention Center. His job is to attach steel I beams for the building shell or structure. Randy will also be on the jobsite as the electricians are on the job installing conduit and pulling electrical and fiber cable through the building. The construction process also calls for fire retardant to be sprayed throughout the structure as the construction is in progress.

Questions:

Please answer the following: (copy and paste the questions to a new document and submit)

Note: Please use the PPE Eye and Head Protection Checklist to answer questions that follow this case study.

1. What type of eye protection would you select for this job for Randy?
2. What type of head protection would you select for this job for Randy?
3. Are the other workers (electricians and fire specialists) required to have PPE for eye protection and head protection?
4. If so, what is that protection?

Grading Criteria

This assignment is worth 100 points.



6.4 - Reflection #6: Pause, Reflect, Question [Optional Section]

Concept Content:

Pause, Reflect, Question

Instructions

Now that you have completed the content portion of this module and have read the instructions for your assignments, it is time to reflect on what you have learned so far. Before launching into your assignment(s), what questions remain?

Here are some questions to ask yourself to help you reflect on your learning:

- What new concepts really resonate with you?
- What new concepts remain cloudy or unclear?
- What practical questions do you have about the upcoming assignment?



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You get 30 point(s) for posting a reflection or question(s). I will join the discussion to clarify questions and answers.



6.5 - Discussion #6 [Optional Section]

Concept Content:

Discussion #6

Purpose of the Discussion

This discussion provides you an opportunity to further reflect on SDS and PPE. It offers you the room to explore topics, issues, and questions.

Learning Objectives

- Reflect on overall learning in module.

Directions

Create a post with an answer to the following questions.

Part 1- Respond to the following prompts:

- Choose one of your answers to Reflection #6 and post it to the discussion below.

Part 2 - Responding to Posts

- Respond to two (2) peers posts commenting on the similarities and differences of your posts.

Part 3 - Response to peer response to original post.

- Respond to at least one of your peer's responses to your original post.

Grading Criteria

This assignment is worth 10 points.



6.6 - Module Wrap-Up Page

Concept Content:

Module Wrap-Up Page

In Module 6, we learned about Safety Data Sheets and Personal Protective Equipment and Clothing.

Please be sure you have completed all of this week's assignments. They are:

- Quiz #7: SDS
- Quiz #8: HAZ COM & Chemical Exposure
- Assignment #8: Case Study #2—PPE Eye and Head Protection for Welders
- Reflection #6: Pause, Reflect, Question
- Discussion #6

Once you are done with Module 6, you can now move on to the next module. To access it, click on the Modules link, which is located on the left-hand navigation bar, after that date and time.

As always, please feel free to email me with any questions. Have a great week!



Module 7: Machine Safeguarding



7.1 - Module Overview Page

Concept Content:

Module 7: Machine Safeguarding



Overview

Overview

In Module 7, we will learn about Machine Safe-guarding and the Lock Out, Tag Out procedure to control energy. We will examine how to assess a piece of equipment to determine risk, identify which equipment parts need to be guarded, and how to follow the procedure for Lock Out, Tag Out.



Learning Objectives

Module Objectives

At the end of this module, you will be able to:

- (A) Explore Machine Safe-guarding and the Lock Out, Tag Out procedure to control energy (SLO 1, 2, 3).
- (B) Assess a piece of equipment to determine risk (SLO 3).
- (C) Identify which equipment parts need to be guarded (SLO 3).
- (D) Interpret the procedure for Lock-Out, Tag-Out (SLO 1, 2, 3).



READ

Discussion Schedule

| Reading | Time | Outcomes | Due Date |
|--|------------|---|-----------|
| <u>Machine Guarding Checklist</u> | 10 minutes | <ul style="list-style-type: none">• (A) Explore Machine Safe-guarding and the Lock Out, Tag Out procedure to control energy (SLO 1, 2, 3).• (B) Assess a piece of equipment to determine risk (SLO 3).• (C) Identify which equipment parts need to be guarded (SLO 3).• (D) Interpret the procedure for Lock-Out, Tag-Out (SLO 1, 2, 3). | October 2 |
| <u>Machine Guarding Guidelines</u> | 15 minutes | <ul style="list-style-type: none">• (A) Explore Machine Safe-guarding and the Lock Out, Tag Out procedure to control energy (SLO 1, 2, 3).• (B) Assess a piece of equipment to determine risk (SLO 3).• (C) Identify which equipment parts need to be guarded (SLO 3). | October 2 |



WATCH

Discussion Schedule

| Video/PowerPoint | Time | Outcomes | Due Date |
|---|--------------|--|-----------|
| Machine Safeguards: The Basics Video Link: https://www.youtube.com/embed/1ol6de7-YjA | 6:41 minutes | <ul style="list-style-type: none"> • (A) Explore Machine Safe-guarding and the Lock Out, Tag Out procedure to control energy (SLO 1, 2, 3). • (B) Assess a piece of equipment to determine risk (SLO 3). • (C) Identify which equipment parts need to be guarded (SLO 3). | October 2 |
| Lockout Tagout Safety Training Video Link: https://www.youtube.com/embed/CV6BDf40yZg | 4:34 minutes | <ul style="list-style-type: none"> • Interpret the procedure for Lock-Out, Tag-Out. | October 2 |



DISCUSS

Discussion Schedule

| Activity | Time | Outcomes | Due Date |
|---|------------|---|-----------|
| Reflection #7: Pause, Reflect, Question | 15 minutes | • Reflect on module resources | October 2 |
| Discussion #7 | 15 minutes | • Reflect on overall learning in module | October 2 |



Assignments

Assignment Schedule

| Activity | Time | Outcomes | Due Date |
|----------|------|----------|----------|
| | | | |

Assignment #9: Machine Shop/Walkthrough

30 minutes

- (A) Explore Machine Safe-guarding and the Lock Out, Tag Out procedure to control energy (SLO 1, 2, 3).
- (B) Assess a piece of equipment to determine risk (SLO 3).
- (C) Identify which equipment parts need to be guarded (SLO 3).

October 2



QUIZ/TEST

Quiz Schedule

| Activity | Time | Outcomes | Due Date |
|--------------------------------------|--------|---|-------------|
| Quiz #7: SDS | 1 Hour | <ul style="list-style-type: none">• Explore the background and procedures for the new form.• Interpret the timeline and requirements under OSHA for the new form.• Determine how to decipher important health and safety information on Sodium Hydroxide using the new form.• Differentiate who has responsibility for elements of the HAZ COM Standard. | September 4 |
| Quiz #8: HAZ COM & Chemical Exposure | 1 Hour | | |



WRAP-UP

In Module 7, we learned about Machine Safe-guarding and the Lock Out, Tag Out procedure to control energy. We explored how to assess a piece of equipment to determine risk, identify which equipment parts need to be guarded, and how to follow the procedure for Lock-Out, Tag-Out. We continue our learning in Module 8 with an study of Slips, Trips and Falls.



7.2 - Curriculum & Content Resource Page

Concept Content:

Curriculum & Content

Approximate time to complete all requirements: 45 minutes.

In Module 7, you will learn about Machine Safe-guarding and the Lock Out, Tag Out procedure to

control energy. The OSHA standard requires that guarding of machines must be provided to protect people from point of operation hazards such as nip points, rotating parts, flying chips, and sparks. Point of operation refers to the area on the machine where the work is performed on the material being processed.



Readings

- [Machine Guarding Checklist](#)
- Machine Guarding Guidelines - This is located in the resources tab for this module. Read pages 9-29 in particular.



Lectures

- [Machine Safeguards: The Basics](#)

Video Link: <https://www.youtube.com/embed/1ol6de7-YjA>

• [Lockout Tagout Safety Training](#)

Video Link: <https://www.youtube.com/embed/CV6BDf40yZg>



7.3 - Assignment #9: Machine Shop Walkthrough

Concept Content:

Assignment #9: Machine Shop Walkthrough

Overview

In this assignment, you will select one piece of equipment in the workplace or your home and complete the Machine Guarding Checklist.

Objectives

- Explore Machine Safe-guarding and the Lock Out, Tag Out procedure to control energy.
- Assess a piece of equipment to determine risk.
- Identify which equipment parts need to be guarded.

Instructional Materials

1. Reading list
2. Videos

Instructions

- After reviewing the lesson information, please select one piece of equipment in the workplace or your home and complete the [Machine Guarding Checklist](#). Note: In some cases, the questions will be irrelevant, so you can just note NA (not applicable). If you do not work in industry, please select a piece of equipment that you or a neighbor own. Some acceptable examples are: a food processor, a lawn mover (push or riding), a chain saw, a wood chipper, or a circular saw. All of these pieces of equipment have a number of safeguards, known as "engineered controls" that protect you.
- Copy the Machine Guarding Checklist and paste in a word document.
- Put your name and what piece of equipment you evaluated at the top of the sheet.
- Upload your Word document to this assignment link.

Grading Criteria

This assignment is worth 100 points.



7.4 - Reflection #7: Pause, Reflect, Question [Optional Section]

Concept Content:

Pause, Reflect, Question

Instructions

Now that you have completed the content portion of this module and have read the instructions for your assignments, it is time to reflect on what you have learned so far. Before launching into your assignment(s), what questions remain?

Here are some questions to ask yourself to help you reflect on your learning:

- What new concepts really resonate with you?
- What new concepts remain cloudy or unclear?
- What practical questions do you have about the upcoming assignment?



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You get 30 point(s) for posting a reflection or question(s). I will join the discussion to clarify questions and answers.



7.5 - Discussion #7 [Optional Section]

Concept Content:

Discussion #7

Purpose of the Discussion

This discussion provides you an opportunity to further reflect on Machine Safeguarding. It offers you the room to explore topics, issues, and questions.

Learning Objectives

- Reflect on overall learning in module.

Directions

Create a post with an answer to the following questions.

Part 1- Respond to the following prompts:

- Choose one of your answers to Reflection #7 and post it to the discussion below.

Part 2 - Responding to Posts

- Respond to two (2) peers posts commenting on the similarities and differences of your posts.

Part 3 - Response to peer response to original post.

- Respond to at least one of your peer's responses to your original post.

Grading Criteria

This assignment is worth 10 points.



7.6 - Module Wrap-Up Page

Concept Content:

Module Wrap-Up Page

In Module 7, we learned about Machine Safeguarding and Lock-Out, Tag-Out safety procedures.

Please be sure you have completed all of this week's assignments. They are:

- Assignment #9: Machine Shop/Walkthrough
- Reflection #7: Pause, Reflect, Question
- Discussion #7

Once you are done with Module 7, you can now move on to the next module. To access it, click on the Modules link, which is located on the left-hand navigation bar, after that date and time.

As always, please feel free to email me with any questions. Have a great week!



Module 8: Walking Working Surfaces



8.1 - Module Overview Page

Concept Content:

Module 8: Walking Working Surfaces



Overview

Overview

In Module 8, we will explore Slip, Trip, and Fall accidents. Slip, Trip and Fall accidents account for more than 16% of disabling work injuries. The construction trades are especially prone to slip, trip and fall injuries and one of the most dangerous trades as a result.



Learning Objectives

Module Objectives

At the end of this module, you will be able to:

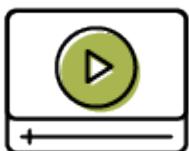
- (A) Review the Department of Labor Statistics for North Carolina workplace fatalities (SLO 1).
- (B) Understand the high fatality rate from slip trip and fall accidents (SLO 2).
- (C) Determine prevention of those hazards (SLO 3).



READ

Discussion Schedule

| Reading | Time | Outcomes | Due Date |
|---|------------|---|----------|
| <u>Number of Fatal Work Injuries</u> | 15 minutes | <ul style="list-style-type: none">• (A) Review the Department of Labor Statistics for North Carolina workplace fatalities (SLO 1).• (B) Understand the high fatality rate from slip trip and fall accidents (SLO 2). | |
| <u>Accident Prevention, Slips, Trips, and Falls</u> | 10 minutes | <ul style="list-style-type: none">• (C) Determine prevention of those hazards (SLO 3). | |



WATCH

Discussion Schedule

| Video/PowerPoint | Time | Outcomes | Due Date |
|------------------|------|----------|----------|
| | | | |

[Walking & Working Surfaces \(PowerPoint\) Pt 1](#)

30 minutes

- Review the Department of Labor Statistics for North Carolina workplace fatalities.
- Understand the high fatality rate from slip trip and fall accidents.
- Determine prevention of those hazards.
- Review causes of Slips, Trips, and Falls.
- Review ways to prevent Slips, Trips, and Falls.

15 minutes

- Review the Department of Labor Statistics for North Carolina workplace fatalities.
- Understand the high fatality rate from slip trip and fall accidents.
- Determine prevention of those hazards.
- Review causes of Slips, Trips, and Falls.
- Review ways to prevent Slips, Trips, and Falls.



DISCUSS

| Activity |
|---|
| Reflection #8: Pause, Reflect, Question |
| Discussion #8 |

Discussion Schedule

| Activity | Time | Outcomes | Due Date |
|---|------------|---|-----------|
| Reflection #8: Pause, Reflect, Question | 15 minutes | • Reflect on module resources | October 2 |
| Discussion #8 | 15 minutes | • Reflect on overall learning in module | October 2 |



QUIZ/TEST

| Activity |
|-------------------------------------|
| Quiz #9: Slip, Trip, Fall Accidents |

Quiz Schedule

| Activity | Time | Outcomes | Due Date |
|-------------------------------------|------------|--|----------|
| Quiz #9: Slip, Trip, Fall Accidents | 15 Minutes | <ul style="list-style-type: none">• Review the Department of Labor Statistics for North Carolina workplace fatalities.• Understand the high fatality rate from slip trip and fall accidents.• Determine prevention of those hazards. | |



WRAP-UP

In Module 8, we learned about Walking Working Surfaces. We viewed the Department of Labor Statistics for North Carolina workplace fatalities. realized the high fatality rate from slip trip and fall accidents, and determined prevention of those hazards. We continue our learning in Module 9 with a mid-term review of our learning thus far.



8.2 - Curriculum & Content Page

Concept Content:

Curriculum & Content

Approximate time to complete all requirements: 1.5 hours.

In Module 8, we will explore Slip, Trip, and Fall accidents. Slip, Trip and Fall accidents account for more than 16% of disabling work injuries. The construction trades are especially prone to slip, trip and fall injuries and one of the most dangerous trades as a result. All workplaces are susceptible to falls and you might be surprised to learn that the most common accident and Worker's Compensation claim at **[college name]** for employees is from slip, trip and fall accidents. **[This claim only applies if it is true for your institution. If it is not, please cut out the last sentence]**



Readings

- [Number of Fatal Work Injuries](#)
- [Accident Prevention, Slips, Trips, and Falls](#)



Lectures

- [Walking & Working Surfaces \(PowerPoint\) Pt 1](#)
- [Walking & Working Surfaces \(PowerPoint\) Pt 2](#)



8.3 - Quiz #9: Slips, Trips, Falls

Concept Content:

This module's quiz is located in the resources tab - 11 Questions



8.4 - Reflection #8: Pause, Reflect, Question [Optional Section]

Concept Content:

Pause, Reflect, Question

Instructions

Now that you have completed the content portion of this module and have read the instructions for your assignments, it is time to reflect on what you have learned so far. Before launching into your assignment(s), what questions remain?

Here are some questions to ask yourself to help you reflect on your learning:

- What new concepts really resonate with you?
- What new concepts remain cloudy or unclear?
- What practical questions do you have about the upcoming assignment?



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You get 30 point(s) for posting a reflection or question(s). I will join the discussion to clarify questions and answers.



8.5 - Discussion #8 [Optional Section]

Concept Content:

Discussion #7

Purpose of the Discussion

This discussion provides you an opportunity to further reflect on Slip, Trips, and Falls. It offers you the room to explore topics, issues, and questions.

Learning Objectives

- Reflect on overall learning in module.

Directions

Create a post with an answer to the following questions.

Part 1- Respond to the following prompts:

- Choose one of your answers to Reflection #8 and post it to the discussion below.

Part 2 - Responding to Posts

- Respond to two (2) peers posts commenting on the similarities and differences of your posts.

Part 3 - Response to peer response to original post.

- Respond to at least one of your peer's responses to your original post.

Grading Criteria

This assignment is worth 10 points.



8.6 - Module Wrap-Up Page

Concept Content:

Module Wrap-Up Page

In Module 8, we learned about Slips, Trips, and Fall accidents.

Please be sure you have completed all of this week's assignments. They are:

- Quiz #9: Slips, Trips, Falls
- Reflection #8: Pause, Reflect, Question
- Discussion #8

Once you are done with Module 8, you can now move on to the next module. To access it, click on

the Modules link, which is located on the left-hand navigation bar, after that date and time.

As always, please feel free to email me with any questions. Have a great week!

Module 9: Mid-Term Exam

9.1 - Module Overview Page

Concept Content:

Module 9: Mid-Term Exam



Overview

In Module 9, we will demonstrate our learning of course materials up to this point. The mid-term exam includes 25 questions covering Modules 1-8 in the course. Please review all course materials up to this point. The exam will be open from Saturday, October 15, from 8:00 a.m. through Sunday, October 15, at 11:59 pm.



Course Description & Student Learning Objectives

This course introduces the principles of industrial safety. Emphasis is placed on industrial safety and OSHA regulations. Upon completion, students should be able to demonstrate knowledge of a safe working environment and OSHA compliance.

At the completion of the course, students should be able to do the following:

1. Demonstrate how to access the Occupational Safety and Health Standards and information that supports the standards.
2. Describe how and why each of the general industry standards were developed.
3. Describe how to abate (lessen in degree) a safety hazard and create a safer working condition.
4. Develop a thorough accident investigation and present it using Power Point.
5. Identify multiple reasons for an accident given a real accident scenario in an industrial setting.
6. Describe in a written report, the different jurisdictions of the OSHA, DOT, and EPA that are involved in an industrial case study.
7. Evaluate ergonomic deficiencies in material handling tasks found in an industrial setting.



Module Objectives

This mid-term exams covers objectives from Modules 1-8. Review Module 1-8 objectives on the Getting Started Overview Page in the Modules Objectives section.



DISCUSS

Discussion Schedule

| Activity | Time | Outcomes | Due Date |
|----------|------|----------|----------|
|----------|------|----------|----------|

Reflection #9: Mid-Term Reflection 15 Minutes • **Reflect on module resources October 16**



QUIZ/TEST

Quiz Schedule

| Activity | Time | Outcomes | Due Date |
|----------|------|----------|----------|
|----------|------|----------|----------|

Mid-Term Exam 1 Hour • Review Module 1-8 Objectives on the Getting Started Page October 16



WRAP-UP

In Module 9, we conducted a mid-term review of our learning in the course so far.. We continue our learning in Module 10 with an exploration of Confined Spaces.

 **9.2 - Mid Term Exam**

 **9.3 - Reflection #9: Mid-Term Reflection [Optional Section]**

Concept Content:

Pause, Reflect, Question

Instructions

Now that you have completed the content portion of this module and have read the instructions for your assignments, it is time to reflect on what you have learned so far. Before launching into your assignment(s), what questions remain?

Here are some questions to ask yourself to help you reflect on your learning:

- What kinds of efforts have you made that have helped you have a positive experience in this class?
- What are some of the key points of learning you've gained from the course thus far?
- How has this knowledge changed your understanding of the world and yourself?
- In what ways can you apply the knowledge you've gained to the compelling Industrial Safety issues of our day?
- What steps will you continue taking to ensure your success in this course?



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You get 30 point(s) for posting a reflection or question(s). I will join the discussion to clarify questions and answers.



9.4 - Discussion #9 [Optional Section]

Concept Content:

Discussion #9

Purpose of the Discussion

This discussion provides you an opportunity to further reflect on your mid-term learning. It offers you the room to explore topics, issues, and questions.

Learning Objectives

- Reflect on overall learning in module.

Directions

Create a post with an answer to the following questions.

Part 1- Respond to the following prompts:

- Choose one of your answers to Reflection #9 and post it to the discussion below.

Part 2 - Responding to Posts

- Respond to two (2) peers posts commenting on the similarities and differences of your posts.

Part 3 - Response to peer response to original post.

- Respond to at least one of your peer's responses to your original post.

Grading Criteria

This assignment is worth 10 points.



9.5 - Module Wrapup Page

Concept Content:

Module Wrap-Up Page

In Module 9, we conducted a mid-term review of our learning.

Please be sure you have completed all of this week's assignments. They are:

- Mid-Term Exam
- Reflection #9: Mid-Term Reflection

Once you are done with Module 9, you can now move on to the next module. To access it, click on the Modules link, which is located on the left-hand navigation bar, after that date and time.

As always, please feel free to email me with any questions. Have a great week!

Module 10: Electrical Safety

10.1 - Module Overview Page

Concept Content:

Module 10: Electrical Safety



Overview

In Module 10, we will explore electrical safety. In this module, we will learn about the basics of electrical safety. This includes electrical safety-related work practices, electrical requirements for portable equipment, and grounding requirements per OSHA guidelines.



Module Objectives

At the end of this module, you will be able to:

- (A) Explore electrical safety basics.
- (B) Explore electrical safety-related work practices.
- (C) Explore electrical safety requirements for portable equipment
- (D) Explore grounding requirements



WATCH

Discussion Schedule

| Video/PowerPoint | Time | Outcomes | Due Date |
|---|------------|---|------------|
| Electrical Safety-Related Work Practices (PowerPoint) | 15 Minutes | <ul style="list-style-type: none">• (A) Explore electrical safety basics.• (B) Explore electrical safety-related work practices. | October 23 |
| Electrical Requirements for Portable Equipment (PowerPoint) | 15 Minutes | <ul style="list-style-type: none">• (C) Explore electrical safety requirements for portable equipment. | October 23 |
| Grounding Requirements (PowerPoint) | 15 Minutes | <ul style="list-style-type: none">• (D) Explore grounding requirements. | October 23 |

[Electrocution Prevention Safety Training from SafetyVideos.com](https://www.safetyvideos.com/electrocution-prevention-safety-training)

| | | | |
|--|------------|--|------------|
| | | | |
| | 21 Minutes | <ul style="list-style-type: none">• (A) Explore electrical safety basics.• (B) Explore electrical safety-related work practices.• (C) Explore electrical safety requirements for portable equipment• (D) Explore grounding requirements | October 23 |



DISCUSS

| Discussion Schedule | | | |
|--|------------|---|------------|
| Activity | Time | Outcomes | Due Date |
| Reflection #10: Pause, Reflect, Question | 15 minutes | <ul style="list-style-type: none">• Reflect on module resources | October 23 |
| Discussion #9 | 15 minutes | <ul style="list-style-type: none">• Reflect on overall learning in module | October 23 |



QUIZ/TEST

| Quiz Schedule | | | |
|-----------------------------|--------|--|------------|
| Activity | Time | Outcomes | Due Date |
| Quiz #10: Electrical Safety | 1 Hour | <ul style="list-style-type: none">• (A) Explore electrical safety basics.• (B) Explore electrical safety-related work practices.• (C) Explore electrical safety requirements for portable equipment• (D) Explore grounding requirements | October 23 |



WRAP-UP

In Module 10, we learned about Confined Spaces. We learned about the hazards associated with confined space entry, how rescue procedures should be handled, and how chemicals react in confined spaces. We continue our learning in Module 11 with an exploration of Fire Safety.



10.2 - Curriculum & Content Page

Concept Content:

Curriculum & Content

Approximate time to complete all requirements: 1.5 Hours.

In Module 10, we will explore electrical safety. In this module, we will learn about the basics of electrical safety. This includes electrical safety-related work practices, electrical requirements for portable equipment, and grounding requirements per OSHA guidelines.



Lectures

- Electrical Safety-Related Work Practices (PowerPoint) - Located in Resources Tab
- Electrical Requirements for Portable Equipment (PowerPoint) - Located in Resources Tab
- Grounding Requirements (PowerPoint) - Located in Resources Tab
- [Electrocution Prevention Safety Training from SafetyVideos.com](http://SafetyVideos.com)



10.3 - Assignment: Hazard Recognition Workshop Subpart K

Concept Content:

In the resources tab, download the Hazard Recognition Workshop powerpoint. Fill in the blanks for each example of a hazard and upload the completed form to **[insert school LMS here]**



10.4 - Reflection #10: Pause, Reflect, Question [Optional Section]

Concept Content:

Pause, Reflect, Question

Instructions

Now that you have completed the content portion of this module and have read the instructions for your assignments, it is time to reflect on what you have learned so far. Before launching into your assignment(s), what questions remain?

Here are some questions to ask yourself to help you reflect on your learning:

- What new concepts really resonate with you?
- What new concepts remain cloudy or unclear?

- What practical questions do you have about the upcoming assignment?



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You get 30 point(s) for posting a reflection or question(s). I will join the discussion to clarify questions and answers.



10.5 - Discussion #10 [Optional Section]

Concept Content:

Discussion #10

Purpose of the Discussion

This discussion provides you an opportunity to further reflect on Confined Spaces. It offers you the room to explore topics, issues, and questions.

Learning Objectives

- Reflect on overall learning in module.

Directions

Create a post with an answer to the following questions.

Part 1- Respond to the following prompts:

- Choose one of your answers to Reflection #10 and post it to the discussion below.

Part 2 - Responding to Posts

- Respond to two (2) peers posts commenting on the similarities and differences of your posts.

Part 3 - Response to peer response to original post.

- Respond to at least one of your peer's responses to your original post.

Grading Criteria

This assignment is worth 10 points.



10.6 - Module Wrapup Page

Concept Content:

Module Wrap-Up Page

In Module 10, we learned about confined spaces.

Please be sure you have completed all of this week's assignments. They are:

- Quiz #10: Confined Space Entry
- Reflection #10: Pause, Reflect, Question
- Discussion #9

Once you are done with Module 10, you can now move on to the next module. To access it, click on the Modules link, which is located on the left-hand navigation bar, after that date and time.

As always, please feel free to email me with any questions. Have a great week!



Module 11: Emergency Action Plans



11.1 - Module Overview Page

Concept Content:

Module 11: Emergency Action Plans



Overview

Overview

In Module 11, we will begin to learn about Exit Routes, Emergency Action Plans, Fire Prevention Plans, and Fire Protection. Emergencies can happen at anytime, so it is important to understand the basics of how to plan for emergencies and how to act in them. We will also explore the more common hazards of the extinguishing equipment that you may be exposed to.



Learning Objectives

Module Objectives

At the end of this module, you will be able to:

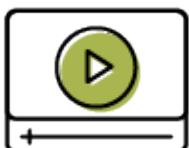
- (A) Explore Portable Fire Suppression Equipment and Fire Hazards (SLO 1, 2).
- (B) Determine the causes of common fire hazards (SLO 1, 2).
- (C) Identify fire prevention strategies in the workplace (SLO 3).
- (D) Examine how to extinguish a fire using fire suppression equipment (SLO 3).
- (E) Explore how to manage emergency situations (SLO 3)



READ

Discussion Schedule

| Reading | Time | Outcomes | Due Date |
|--|------------|---|------------|
| Fire Protection and Fire Suppression | 15 minutes | <ul style="list-style-type: none">• (A) Explore Portable Fire Suppression Equipment and Fire Hazards (SLO 1, 2).• (B) Determine the causes of common fire hazards (SLO 1, 2).• (C) Identify fire prevention strategies in the workplace (SLO 3).• (D) Examine how to extinguish a fire using fire suppression equipment (SLO 3). | October 30 |



WATCH

Discussion Schedule

| Video/PowerPoint | Time | Outcomes | Due Date |
|------------------|------|----------|----------|
|------------------|------|----------|----------|

| | | |
|--|------------|---|
| <u>Exit Routes, Emergency Action Plans, Fire Prevention Plans, and Fire Protection</u> | 50 Minutes | <ul style="list-style-type: none"> • E) Explore how to manage emergency situations (SLO 3) • (A) Explore Portable Fire Suppression Equipment and Fire Hazards (SLO 1, 2). • (B) Determine the causes of common fire hazards (SLO 1, 2). • (C) Identify fire prevention strategies in the workplace (SLO 3). • (D) Examine how to extinguish a fire using fire suppression equipment (SLO 3). • (A) Explore Portable Fire Suppression Equipment and Fire Hazards (SLO 1, 2). |
| <u>Exit Routes, Emergency Action Plans, Fire Prevention Plans, and Fire Protection (YouTube Video)</u> | 8 minutes | <ul style="list-style-type: none"> • (C) Identify fire prevention strategies in the workplace (SLO 3). • (D) Examine how to extinguish a fire using fire suppression equipment (SLO 3). • (A) Explore Portable Fire Suppression Equipment and Fire Hazards (SLO 1, 2). |
| <u>Portable Fire Extinguishers - Understanding Their Use and Limitations</u> | 13 minutes | <ul style="list-style-type: none"> • (A) Explore Portable Fire Suppression Equipment and Fire Hazards (SLO 1, 2). |



DISCUSS

Discussion Schedule

| Activity | Time | Outcomes | Due Date |
|--|------------|---|----------|
| Reflection #11: Pause, Reflect, Question | 15 minutes | • Reflect on module resources | |
| Discussion #10 | 15 minutes | • Reflect on overall learning in module | |



WRAP-UP

In Module 11, we learned about Exit Routes, Emergency Action Plans, Fire Prevention Plans, and Fire Protection. Emergencies can happen at anytime so knowing how to prepare for them is an important skill to have.



11.2 - Curriculum & Content Page

Concept Content:

Curriculum & Content Emergency Action Plans

Approximate time to complete all requirements: 45 minutes

In Module 11, we will begin to learn about Exit Routes, Emergency Action Plans, Fire Prevention

Plans, and Fire Protection. Emergencies can happen at anytime, so it is important to understand the basics of how to plan for emergencies and how to act in them. We will also explore the more common hazards of the extinguishing equipment that you may be exposed to.



Readings

- [Fire Protection and Fire Suppression](#)



Lectures

- [Exit Routs, Emergency Action Plans, Fire Prevention Plans, and Fire Protection \(PowerPoint\)](#)
- [Portable Fire Extinguishers - Understanding Their Use and Limitations \(YouTube\)](#)
- [Exit Routes, Emergency Action Plans, Fire Prevention Plans, and Fire Protection \(YouTube\)](#)



11.3 - Quiz #11: Fire Suppression



11.4 - Reflection #11: Pause, Reflect, Question [Optional Section]

Concept Content:

Pause, Reflect, Question

Instructions

Now that you have completed the content portion of this module and have read the instructions for your assignments, it is time to reflect on what you have learned so far. Before launching into your assignment(s), what questions remain?

Here are some questions to ask yourself to help you reflect on your learning:

- What new concepts really resonate with you?
- What new concepts remain cloudy or unclear?
- What practical questions do you have about the upcoming assignment?



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You get 30 point(s) for posting a reflection or question(s). I will join the discussion to clarify questions and answers.



11.5 - Discussion #11 [Optional Section]

Concept Content:

Discussion #11

Purpose of the Discussion

This discussion provides you an opportunity to further reflect on Fire Suppression. It offers you the room to explore topics, issues, and questions.

Learning Objectives

- Reflect on overall learning in module.

Directions

Create a post with an answer to the following questions.

Part 1- Respond to the following prompts:

- Choose one of your answers to Reflection #11 and post it to the discussion below.

Part 2 - Responding to Posts

- Respond to two (2) peers posts commenting on the similarities and differences of your posts.

Part 3 - Response to peer response to original post.

- Respond to at least one of your peer's responses to your original post.

Grading Criteria

This assignment is worth 10 points.



11.6 - Module Wrap-Up Page

Concept Content:

Module Wrap-Up Page

In Module 11, we learned about Fire Suppression.

Please be sure you have completed all of this week's assignments. They are:

- Quiz #11: Fire Suppression
- Reflection #11: Pause, Reflect, Question
- Discussion #10

Once you are done with Module 11, you can now move on to the next module. To access it, click on the Modules link, which is located on the left-hand navigation bar, after that date and time.

As always, please feel free to email me with any questions. Have a great week!



Module 12: Means of Egress and Confined Spaces



12.1 - Module Overview Page

Concept Content:

Module 12: Means of Egress and Confined Spaces



Overview

In Module 12, we will learn about Means of Egress. The General Industry Standard requires that employers ensure that employees have a safe, accessible, and efficient means of escaping a building under emergency circumstances. Emergency circumstances may be caused by fire, explosions, hurricanes, tornadoes, flooding, terrorist acts, earthquakes, nuclear radiation, active shooter or other acts of nature not listed here.

A very famous "Means of Egress" case happened in North Carolina, in 1991 in Hamlet, NC. A fire in a chicken processing plant killed 25 employees, and injured 55 more, and was seen as one of the most serious workplace tragedies in the nation. The Commissioner of Labor, John Brooks lost his job and Emmett Roe, the owner of the plant was sent to prison. In this lesson, we will review that case and look at the consequences of violation of the standard for the employees, the employer and the State of North Carolina.

Also, as you read the standard and learn about means of egress, pay close attention to your workplace, your home any building that you enter (to shop, for recreation, to attend a movie, etc.) and see if there are clear directions on how to exit the building in the event of an emergency!! This could save your life and those around you. Locked exit doors, or doors that seem to lead to an exit but do not, are far more common than you might imagine.

We will also explore confined spaces. In this module, we will learn about how confined spaces are not designed for continuous occupancy and can be difficult to exit in the event of an emergency. Those spaces may also contain a hazardous atmosphere that exposes employees to the risk of death, incapacitation, impairment of ability to self-rescue, injury, or acute illness. Far too often, when one employee enters a confined space and is incapacitated, the second untrained person to enter the space to perform a rescue also becomes a victim (much like a double drowning). This is the reason for a very prescribed OSHA Standard that covers Confined Space Entry.



Module Objectives

At the end of this module, you will be able to:

- (A) Interpret the OSHA standard for Means of Egress (Exits) (SLO 1, 2, 3).
- (B) Explore examples of cases where the standard was violated and the consequences of non-compliance (SLO 5).
- (C) Identify reasons for catastrophic events resulting from blocked exits (SLO 5).
- (D) Explore the hazards associated with confined space entry (SLO 1, 2, 3).
- (E) Identify how rescue procedures should be handled (SLO 1, 2, 3).
- (F) Examine how chemicals react in confined spaces (SLO 1, 2, 3).



READ

Discussion Schedule

| Reading | Time | Outcomes | Due Date |
|--|------------|---|------------|
| OSHA Means of Egress Standard | 10 minutes | • (A) Interpret the OSHA standard for Means of Egress (Exits). | November 6 |
| Emergency Exit Routes, OSHA Fact Sheet | 15 minutes | • (C) Identify reasons for catastrophic events resulting from blocked exits. | November 6 |
| Hamlet Chicken Processing Plant Fire | 20 minutes | • (B) Explore examples of cases where the standard was violated and the consequences of non-compliance. | November 6 |
| TEC Design Considerations | 10 minutes | • (C) Identify reasons for catastrophic events resulting from blocked exits. | November 6 |
| Confined Space OSHA Guide | 1 Hour | • (D) Explore the hazards associated with confined space entry (SLO 1, 2, 3). • (E) Identify how rescue procedures should be handled (SLO 1, 2, 3). • (F) Examine how chemicals react in confined spaces (SLO 1, 2, 3). | November 6 |



WATCH

Discussion Schedule

| Video/PowerPoint | Time | Outcomes | Due Date |
|--|---------------|---|------------|
| Hamlet, Out of the Ashes (YouTube) Video Link: https://www.youtube.com/embed/9G5dWMXz8V8 | 22:33 minutes | • (B) Explore examples of cases where the standard was violated and the consequences of non-compliance. | November 6 |



Assignments

Assignment Schedule

| Activity | Time | Outcomes | Due Date |
|----------|------|----------|----------|
| | | | |

| | | | |
|--|------------|--|------------|
| Assignment #10: Hamlet Fire | 30 minutes | <ul style="list-style-type: none"> • (A) Interpret the OSHA standard for Means of Egress (Exits). • (B) Explore examples of cases where the standard was violated and the consequences of non-compliance. • (C) Identify reasons for catastrophic events resulting from blocked exits. • (D) Explore the hazards associated with confined space entry (SLO 1, 2, 3). • (E) Identify how rescue procedures should be handled (SLO 1, 2, 3). • (F) Examine how chemicals react in confined spaces (SLO 1, 2, 3). | November 6 |
| <u>Confined Space Manhole (PowerPoint)</u> | 15 minutes | | November 6 |



DISCUSS

| Activity | Time | Outcomes | Due Date |
|--|------------|---|------------|
| Reflection #12: Pause, Reflect, Question | 15 minutes | • Reflect on module resources | November 6 |
| Discussion #11 | 15 minutes | • Reflect on overall learning in module | November 6 |



WRAP-UP

In Module 12, we learned about Means of Egress. We learned about how to interpret the OSHA standard for Means of Egress (Exits); that "means of egress" also includes the path to the exit and the path away from the building; examples of cases where the standard was violated and the consequences of non-compliance; and reasons for catastrophic events resulting from blocked exits. We continue our learning in Module 13 with Ergonomics.



12.2 - Curriculum & Content Page

Concept Content:

Curriculum & Content

Approximate time to complete all requirements: 2.5 Hours

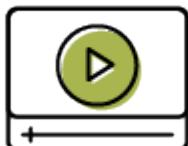
In Module 12, we will begin to learn about Means of Egress. We will learn how to interpret the OSHA standard for Means of Egress (Exits); that "means of egress" also includes the path to the exit and the path away from the building; examples of cases where the standard was violated and the consequences of non-compliance; and reasons for catastrophic events resulting from blocked exits.

We will also begin to learn about Confined Spaces. Confined spaces are not designed for continuous occupancy and can be difficult to exit in the event of an emergency. Those spaces may also contain a hazardous atmosphere that exposes employees to the risk of death, incapacitation, impairment of ability to self-rescue, injury, or acute illness. Far too often when one employee enters a confined space and is incapacitated, the second untrained person to enter the space to perform a rescue also becomes a victim (much like a double drowning.) This is the reason for a very prescribed OSHA Standard that covers Confined Space Entry.



Readings

- [OSHA Means of Egress Standard](#)
- [Emergency Exit Routes, OSHA Fact Sheet](#)
- [Hamlet Chicken Processing Plant Fire](#)
- [TEC Design Considerations](#)
- [Confined Space OSHA Guide](#) - Be sure to read the entire guide.
-



Lectures

- [Hamlet, Out of the Ashes \(YouTube\)](#)

Video Link: <https://www.youtube.com/embed/9G5dWMXz8V8>

[Confined Space Manhole \(PowerPoint\)](#)



12.3 - Assignment #10: Hamlet Fire

Concept Content:

Assignment #10: Hamlet Fire

Overview

In this assignment, you will list 15 Reasons that the Imperial Chicken Plant at Hamlet, NC in 1991 was so deadly and 3 Positive Outcomes from the fire.

Objectives

- Explore examples of cases where the standard was violated and the consequences of non-

compliance.

- Identify reasons for catastrophic events resulting from blocked exits.

Instructional Materials

1. Reading list
2. Videos

Instructions

- After reviewing the lesson information, please list 15 Reasons that the Imperial Chicken Plant at Hamlet, NC in 1991 was so deadly. (Note: not all of the reasons were due to OSHA violations of means of Egress.) Also, list 3 Positive Outcomes from the fire.
- Please copy and paste these instructions and add your list of reasons to a numbered (1,2,3,4,5, etc.) list and submit via the submission link.
- Hint: the reasons can be found in the both the Hamlet YouTube video and the Wikipedia article on the Hamlet Fire.

Grading Criteria

This assignment is worth 100 points.

 **12.4 - Quiz #10 Confined Spaces**

 **12.4 - Reflection #12: Pause, Reflect, Question [Optional Section]**

Concept Content:

Pause, Reflect, Question

Instructions

Now that you have completed the content portion of this module and have read the instructions for your assignments, it is time to reflect on what you have learned so far. Before launching into your assignment(s), what questions remain?

Here are some questions to ask yourself to help you reflect on your learning:

- What new concepts really resonate with you?
- What new concepts remain cloudy or unclear?
- What practical questions do you have about the upcoming assignment?



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You get 30 point(s) for posting a reflection or question(s). I will join the discussion to clarify questions and answers.



12.5 - Discussion #12 [Optional Section]

Concept Content:

Discussion #12

Purpose of the Discussion

This discussion provides you an opportunity to further reflect on Means of Egress and Confined Spaces. It offers you the room to explore topics, issues, and questions.

Learning Objectives

- Reflect on overall learning in module.

Directions

Create a post with an answer to the following questions.

Part 1- Respond to the following prompts:

- Choose one of your answers to Reflection #12 and post it to the discussion below.

Part 2 - Responding to Posts

- Respond to two (2) peers posts commenting on the similarities and differences of your posts.

Part 3 - Response to peer response to original post.

- Respond to at least one of your peer's responses to your original post.

Grading Criteria

This assignment is worth 10 points.



12.6 - Module Wrap-Up Page

Concept Content:

Module Wrap-Up Page

In Module 12, we learned about Means of Egress and Confined Spaces.

Please be sure you have completed all of this week's assignments. They are:

- Assignment #10: Hamlet Fire
- Quiz #10: Confined Spaces
- Reflection #12: Pause, Reflect, Question
- Discussion #11

Once you are done with Module 12, you can now move on to the next module. To access it, click on the Modules link, which is located on the left-hand navigation bar, after that date and time.

As always, please feel free to email me with any questions. Have a great week!



Module 13: Ergonomics



13.1 - Module Overview Page

Concept Content:

Module 13: Ergonomics



Overview

Overview

In Module 13, we will learn about Ergonomics. We will be introduced to the study of work and the relationship of man to machine. That interaction can sometimes cause repetitive motion injuries and can often be corrected by improving the workspace. Lifting, pushing and pulling are most often the result of work loss time and workplace injuries. Most everyone has experienced a back injury or back strain with certain jobs and with some common sense corrections those injuries can be prevented.



Learning Objectives

Module Objectives

At the end of this module, you will be able to:

- (A) Explore the study of work and the relationship of man to machine (SLO 7).
- (B) Examine causation of common muscle, joint and tendon stress related to the workplace (SLO 7).
- (C) Interpret how workplace design contributes to occupational injuries (SLO 3, 5, 7).



WATCH

Discussion Schedule

| Video/PowerPoint | Time | Outcomes | Due Date |
|---|------------|--|-------------|
| Workplace Ergonomics (PowerPoint) | 5 minutes | <ul style="list-style-type: none">• (A) Explore the study of work and the relationship of man to machine.• (B) Examine causation of common muscle, joint and tendon stress related to the workplace.• (C) Interpret how workplace design contributes to occupational injuries. | November 13 |
| Ergonomics Awareness (PowerPoint) | 45 minutes | <ul style="list-style-type: none">• (A) Explore the study of work and the relationship of man to machine.• (B) Examine causation of common muscle, joint and tendon stress related to the workplace.• (C) Interpret how workplace design contributes to occupational injuries. | November 13 |



DISCUSS

| Discussion Schedule | | | |
|--|------------|---|------------|
| Activity | Time | Outcomes | Due Date |
| Reflection #13: Pause, Reflect, Question | 15 minutes | • Reflect on module resources | November 6 |
| Discussion #12 | 15 minutes | • Reflect on overall learning in module | November 6 |



WRAP-UP

In Module 13, we learned about Ergonomics. We learned about the causation of common muscle, joint and tendon stress related to the workplace; how to avoid common injuries; and how workplace design contributes to occupational injuries. We continue our learning in Module 14 with Accident Investigation.



13.2 - Curriculum & Content Page

Concept Content:

Curriculum & Content

Approximate time to complete all requirements: 1 Hour

In Module 13, we will begin to learn about Ergonomics. We will learn about causation of common muscle, joint and tendon stress related to the workplace; how to avoid common injuries; and how workplace design contributes to occupational injuries.



Lectures

- [Workplace Ergonomics \(PowerPoint\)](#)
- [Ergonomics Awareness \(PowerPoint\)](#)



13.3 - Quiz #12 Ergonomics

Concept Content:

Click on the assignments tab and select practice for this module's assignment.



13.4 - Reflection #13: Pause, Reflect, Question [Optional Section]

Concept Content:

Pause, Reflect, Question

Instructions

Now that you have completed the content portion of this module and have read the instructions for your assignments, it is time to reflect on what you have learned so far. Before launching into your assignment(s), what questions remain?

Here are some questions to ask yourself to help you reflect on your learning:

- What new concepts really resonate with you?
- What new concepts remain cloudy or unclear?
- What practical questions do you have about the upcoming assignment?



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You get 30 point(s) for posting a reflection or question(s). I will join the discussion to clarify questions and answers.



13.5 - Discussion #13 [Optional Section]

Concept Content:

Discussion #13

Purpose of the Discussion

This discussion provides you an opportunity to further reflect on Ergonomics. It offers you the room to explore topics, issues, and questions.

Learning Objectives

- Reflect on overall learning in module.

Directions

Create a post with an answer to the following questions.

Part 1- Respond to the following prompts:

- Choose one of your answers to Reflection #13 and post it to the discussion below.

Part 2 - Responding to Posts

- Respond to two (2) peers posts commenting on the similarities and differences of your posts.

Part 3 - Response to peer response to original post.

- Respond to at least one of your peer's responses to your original post.

Grading Criteria

This assignment is worth 10 points.



13.6 - Module Wrap-Up Page

Concept Content:

Module Wrap-Up Page

In Module 13, we learned about Ergonomics.

Please be sure you have completed all of this week's assignments. They are:

- Quiz #12: Ergonomics
- Reflection #13: Pause, Reflect, Question
- Discussion #12

Once you are done with Module 13, you can now move on to the next module. To access it, click on

the Modules link, which is located on the left-hand navigation bar, after that date and time.

As always, please feel free to email me with any questions. Have a great week!

Module 14: Accident Investigation

14.1 - Module Overview Page

Concept Content:

Module 14: Accident Investigation



Overview

In Module 14, we will learn about Accident Investigation. Please keep in mind that investigating accidents should determine the root causes of the accident so that they can be avoided in the future. The goal is NOT TO ASSIGN BLAME but to prevent the same or similar accident from happening in the future.



Module Objectives

At the end of this module, you will be able to:

- (A) Explore accident investigation (SLO 3, 4, 5, 6).
- (B) Determine the root causes of the accident so that they can be avoided in the future (SLO 3, 4, 5, 6).
- (C) Examine prevention of the same or similar accident from happening in the future (SLO 3, 4, 5, 6).
- (D) Determine the multiple causes of accidents (SLO 3, 4, 5, 6).
- (E) Identify methods of reducing accidents (SLO 3, 4, 5, 6).
- (F) Complete an accident investigation (SLO 3, 4, 5, 6).



READ

Discussion Schedule

Reading

Time

Outcomes

Due Date

[How to Conduct an Accident Investigation](#)

Fatal Occupational Injuries in North Carolina – 2020

NCDOL Releases Workplace Fatality Count For 2021

The 4 Most Common Reasons Workplace Deaths Occur in North Carolina

| | | |
|------------|---|-------------|
| 10 minutes | <ul style="list-style-type: none">• (A) Explore accident investigation.• (B) Determine the root causes of the accident so that they can be avoided in the future.• (C) Examine prevention of the same or similar accident from happening in the future.• (D) Determine the multiple causes of accidents. | December 12 |
| 15 minutes | <ul style="list-style-type: none">• (A) Explore accident investigation.• (B) Determine the root causes of the accident so that they can be avoided in the future.• (C) Examine prevention of the same or similar accident from happening in the future.• (D) Determine the multiple causes of accidents. | December 12 |
| 20 minutes | <ul style="list-style-type: none">• (A) Explore accident investigation.• (B) Determine the root causes of the accident so that they can be avoided in the future.• (C) Examine prevention of the same or similar accident from happening in the future.• (D) Determine the multiple causes of accidents. | December 12 |
| 15 minutes | <ul style="list-style-type: none">• (A) Explore accident investigation.• (B) Determine the root causes of the accident so that they can be avoided in the future.• (C) Examine prevention of the same or similar accident from happening in the future.• (D) Determine the multiple causes of accidents. | December 12 |



WATCH

| Video/PowerPoint | Time | Outcomes | Due Date |
|--|------------|--|-------------|
| Accident Investigation (PowerPoint) | 15 minutes | <ul style="list-style-type: none">• (A) Explore accident investigation.• (B) Determine the root causes of the accident so that they can be avoided in the future.• (C) Examine prevention of the same or similar accident from happening in the future.• (D) Determine the multiple causes of accidents.• (A) Explore accident investigation.• (B) Determine the root causes of the accident so that they can be avoided in the future. | December 12 |
| Accident at DIY Warehouse (PowerPoint) | 15 minutes | <ul style="list-style-type: none">• (C) Examine prevention of the same or similar accident from happening in the future.• (D) Determine the multiple causes of accidents. | December 12 |



Assignments

| Activity | Time | Outcomes | Due Date |
|---|---------|---|-------------|
| Assignment #11: Final Project— Accident Investigation | 2 Hours | <ul style="list-style-type: none">• (A) Explore accident investigation.• (B) Determine the root causes of the accident so that they can be avoided in the future.• (C) Examine prevention of the same or similar accident from happening in the future.• (D) Determine the multiple causes of accidents. | December 12 |



DISCUSS

Discussion Schedule

| Activity | Time | Outcomes | Due Date |
|--|------------|---|-------------|
| Reflection #14: Pause, Reflect, Question | 15 minutes | • Reflect on module resources | December 12 |
| Discussion #13 | 15 minutes | • Reflect on overall learning in module | December 12 |



WRAP-UP

In Module 14, we learned about Accident Investigation. We learned that investigating accidents should determine the root causes of the accident so that they can be avoided in the future. You may now move on to the final module to take the Final Exam.

14.2 - Curriculum & Content Page

Concept Content:

Curriculum & Content

Approximate time to complete all requirements: 1.5 Hours

In Module 14, we will begin to learn about Accident Investigation. We will learn that investigating accidents should determine the root causes of the accident so that they can be avoided in the future and that the goal is NOT TO ASSIGN BLAME but to prevent the same or similar accident from happening in the future.



Readings

- [How to Conduct an Accident Investigation](#)
- [Fatal Occupational Injuries in North Carolina — 2020](#)
- [NCDOL Releases Workplace Fatality Count For 2021](#)
- [The 4 Most Common Reasons Workplace Deaths Occur in North Carolina](#)



Lectures

- [Accident Investigation \(PowerPoint\)](#)
- [Accident at DIY Warehouse \(PowerPoint\)](#)



14.3 - Assignment #11: Final Project Accident Investigation

Concept Content:

Assignment #11: Final Project—Accident Investigation

Overview

In this assignment, you will conduct an investigation of the accident from the Lowe's DIY Center involving the forklift and the child. Investigating accidents is a vital part of any safety program. The emphasis on the investigation is not to place blame but to find the reasons for the accident so they can be prevented in the future.

Objectives

- Explore accident investigation.
- Determine the root causes of the accident so that they can be avoided in the future.
- Examine prevention of the same or similar accident from happening in the future.
- Determine the multiple causes of accidents.
- Identify methods of reducing accidents.
- Complete an accident investigation.

Instructional Materials

1. Reading list
2. PowerPoints
3. Sources from the North Carolina Industrial Commission, Bureau of Labor Statistics, and NCOSHA
4. The **[insert college]** Library databases (See #1 below)

Instructions

1. Review the following resources:
 - The Accident Investigation Guidelines starting on slide #19 of the Accident Investigation (PowerPoint).
 - The Sample PowerPoint presentation, Accident at DIY Warehouse
 - How to Conduct an Accident Investigation (PDF)
 - Review sources from the North Carolina Industrial Commission, Bureau of Labor Statistics, and NCOSHA.
 - However, the college library Library might be the best source. You should be able to

research the statewide (and beyond) databases to find what you need. There is even a tutorial on how to use the research databases. And it's all online!!

- To access the college's library, go to the **[insert college]** Home Page and follow these steps: **[list steps to access your college library's database]**

2. Conduct an accident investigation from one of the following categories (choose your preferred category). Be sure that the fatality occurred in North Carolina.

- Transportation (long distance trucking, distribution)
- Slip, Trip, Fall
- Construction fatality, especially falls or trenching
- Chemical reaction fatality
- Manufacturing fatality involving equipment
- Robotics fatality involving being crushed.
- Electrocution

• Prepare a PowerPoint Presentation with a minimum of 10 slides. The presentation must include:

- A list of reasons that this accident occurred. Remember that accidents have more than one cause: (Management, equipment failure, training, etc).
- Describe how to avoid this accident in the future.
- Identify any OSHA violations that occurred.
- All information involving Who, What, When, Where and How. Outline the investigation as the 5 Ws. Use the outline on the Accident Investigation PowerPoint starting with slide #19.

Grading Criteria

This assignment is worth 200 points.



14.4 - Reflection #14: Final Reflection [Optional Section]

Concept Content:

Pause, Reflect, Question

Instructions

Now that you have completed the course, here are some questions to ask yourself to help you reflect on your overall learning in the course:

- What was the most challenging part of this course for you?
- What are the three most important things you learned in this course?
- What percentage of what you learned in this course do you think will be useful to you in your career?
- What class activities or assignments helped you learn the most?



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You get 30 point(s) for posting a reflection or question(s). I will join the discussion to clarify questions and answers.



14.5 - Discussion #14 [Optional Section]

Concept Content:

Discussion #14

Purpose of the Discussion

This discussion provides you an opportunity to further reflect on overall learning in the course. It offers you the room to explore topics, issues, and questions.

Learning Objectives

- Reflect on overall learning in module.

Directions

Create a post with an answer to the following questions.

Part 1- Respond to the following prompts:

- Choose one of your answers to Reflection #14 and post it to the discussion below.

Part 2 - Responding to Posts

- Respond to two (2) peers posts commenting on the similarities and differences of your posts.

Part 3 - Response to peer response to original post.

- Respond to at least one of your peer's responses to your original post.

Grading Criteria

This assignment is worth 10 points.



14.6 - Module Wrap-Up Page

Concept Content:

Module Wrap-Up Page

In Module 14, we learned about Accident Investigation.

Please be sure you have completed all of this week's assignments. They are:

- Assignment #11: Final Project—Accident Investigation
- Reflection #14: Pause, Reflect, Question
- Discussion #14

Once you complete Module 14, you may move on to the final module to take the Final Exam.



Module 15: Final Exam



15.1 - Module Overview Page

Concept Content:

Module 15: Final Exam

Overview

In Module 15, we finalize our learning with the Final Exam. The Final Exam will cover all content material from Modules 2-14.



Module Objectives

In this final review, you will be able to demonstrate learning in Module 2-14 Learning Objectives. See the Module Learning Objectives on the Getting Started Page.



QUIZ/TEST

Quiz Schedule

Activity Time

Outcomes

Due Date

Final Exam 1 Hour • Review Module 2-14 Objectives on the Getting Started Page. December 12



WRAP-UP

We did it! We've learned the principles of industrial safety. You should now be able to demonstrate knowledge of a safe working environment and OSHA compliance. Congratulations!



15.2 - Final Exam



15.3 - Module Wrap-Up Page

Overview

Concept Content:



Module Wrap-Up Page

In Module 15, we conducted a final review of learning in the course.

- Please be sure you have completed the Final Exam.

This is your final module. Congratulations on completing the course!