**Morehead State University**

**College of Science and Technology**

Department of Applied Engineering and Technology

ATMAE Accredited Program

SYLLABUS
IET 422

**Industrial Safety Standards and Enforcement**

**Spring 2011**

**ONLINE**

**Class Schedule**: MTWThFSaSu

Instructor: Rodney Stanley EdD

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Phone: (606) 783-2427

Office: 105E Lloyd Cassity Building

Office hours: ***ONLINE (EMAIL), Th F 12:40-2:50\****

***\*It is advisable to email and state your need/intention to come by for an office visit. Due to school visit there will be times I will have to reschedule by available office* hours**

**Course Description**

(3-0-3); II. A study of industrial safety codes, standards, regulations, and enforcement

procedures. Explanations of worker safety as related to attitude and production. Review of current laws regulating safety and those agencies related to enforcement and training.

**Student E-mail**

1. All email will be sent using the MSU email accounts provided to you as a student. If you send an email from an outside account.
***ALWAYS include the course number of your class in the subject line and your name in the body of your e-mail.***

**Textbooks (Required)**

Goetsch David L. (2011). Occupational Safety and Health for Technologists, Engineers, and Managers 7th ed. Upper Saddle River, New Jersey: Pearson/Prentice Hall. ISBN: 9780137009169.

Onion, M. & O’Toole, M. (2003). You’ve Just Been Made the Supervisor…Now

What?: Bringing safety to the front line. National Safety Council. Itasca, Ill. ISBN: 9780879122195.

The textbooks are **required** for this course. You can purchase this textbook at the Morehead State University bookstore or from another vendor. The University Bookstore does have online purchase and mailing which seems to be pretty quick if the books are in stock. Please check with the bookstore first. If you purchase from Amazon or Barnes and Noble, they have very fast service as well. Half.com is like eBay…you are relying on the person you bought the book from to be prompt. This is not always the case. If you have any other bookstore near your area, you can go in and have them order it and shipped directly to them as well.

You are responsible for reading the textbooks and attempting to comprehend the material on your own. I am here to guide you through the process and assist you when you are having trouble comprehending the material. It is your responsibility to let me know when you are having trouble understanding the material or what it is you should know.

Before fully reading each chapter of the **Goetsch textbook**, briefly scan the pages to get a sense of what the chapter covers. Next, read the PowerPoint notes (provided by the author of the book) to gain further understanding of the material. Your quizzes will come from the Goetsch textbook.

The **Onion and O’Toole** text is where your discussion questions will come from. It is necessary to understand what is in the Goetsch text and how it will relate to the Onion and O’Toole discussion questions and state your factual answer rather than an opinion. This will also assist you in seeing others perspectives related to those same work environment issues.

**Additional Readings**

There may be additional reading assignments from online sources required for this class.

**Course Content**

This course will cover basic ideas and concepts of safety in all “industries” including construction, manufacturing, heavy industrial processes, and educational settings. Students will be expected to become familiar with general safety as well as develop an expertise in an area of safety that is related to their field of study or employment setting.

**Internet Course Structure**

Methods of instruction will include directed assignments, group work, homework, problem solving, and **class participation**. Black Board (Bb) will be used as the e-learning distribution method for the course.

**Performance Objectives of This Course** *After completion of this course the student will:*

1. Be able to explain the importance of an appropriate safety philosophy.

2. Be able to describe the theories of accident causation and investigate accidents

 looking for the root cause.

3. Be able to describe the legal aspects of safety required of mangers, teachers, etc.

4. Be able to find and understand OSHA standards.

5. Be able to describe specific safety hazards in a variety of industrial processes.

6. Be able to evaluate and/or develop a comprehensive safety program.

7. Be able to explain the importance of safety in today’s global industrial environment

**Group Project**

Each student will pair with one other student and choose their topic (topics cannot be the same as anyone else) to develop a Safety and Health Training presentation using Flash, Lectora, Camtasia, Windows Movie Maker, etc.. which will be posted and presented to the class. The training must be self starting once opened, include voice and graphics over the selected topic from one of the two OSHA manuals (29 CFR 1910 General Industry or 29 CFR 1926 Construction). Every student will be required to take the training developed by each group. Additional information about the project will be provided. Each set of training materials must include a ten question multiple choice evaluation on the main parts of the presentation. The assessment instrument will be submitted as a separate document.

**Research Paper**

Each student will be required to submit a short research paper on an approved topic of their choice. The development of this paper will follow a specific process and must be related to the student’s option area. Additional information about the research paper will be provided.

**OSHA Certification**

Unfortunately, I cannot distribute OSHA certification validation cards for the time you put forth in this course but it is the goal of the department to offer this in the future. This course will help you brush up for OSHA certification and give you insight of how to manage OSHA situations that may arise in industry.

There is another option that is available using CareerSafe (probably the cheapest route). You can Google search CareerSafe and enroll in the course to obtain an OSHA 10-hour General Industry or Construction certification. There are bonus points available if you have a valid OSHA card or obtain one from this or another approved site. The card must be distributed by the OSHA Training Institute to be legal. You must scan the card and send to me in an email as an attached document. You may also mail the copy of the card to me at (105D Lloyd Cassity Bldg. Morehead State University, Morehead, KY 40351) in order to redeem your bonus points.

CareerSafe has a module that is comprised of 10 hours of seat time watching presentations and working through their training modules for

either the OSHA 10-hour General Industry or Construction sections.

**Course Requirements and Evaluation**

**WEEKLY ASSIGNMENTS**

The bulk of your grade is in successful completion of each week’s assignments – which include Discussion Board questions and quizzes and the Group Project Safety Video. **You will need to complete each week’s assignment on successive Mondays by 12 noon (EST).** Bb automatically stamps the date and time you submit quizzes or post a message on the *Discussion Board*. Failure to submit on time will result in zero points for that activity. You will be able to work on the weekends to complete the next week’s content. ***EACH WEEKS CONTENT WILL BE AVAILABLE ON MONDAYS STARTING AT 12 NOON.***

The nature of an on-line class permits you to complete your assignments earlier than they are due, however, to help you learn the material so that you will score well on exams; you should try and complete material throughout the week that it is due, at a relaxed pace.

**FORUM/ DISCUSSION POSTINGS**

You will participate in a “virtual” discussion each week regarding a particular safety, ethical or employee issue. Each week’s question is located as a **Discussion Board** **Forum** under the week you are currently working. Do read other student postings even though you may not respond to it because it may help you understand the topic better. Everyone seems to think that discussion boards are a “Read the question and give an answer…I’m done”. I expect you not only to answer the question or make the comment for credit but also to contribute more by “replying” to others' answers or comments. This will make the course much more interesting for all those involved AND help sway me in pushing your grade up should your total points hover near the next higher grade. It pays to communicate here!

Webster’s definition of discussion is

***“consideration or examination by argument, comment, etc., especially to explore solutions; informal debate.***

NOTE: A reply should be in a conversational sense meaning “I agree with you” will not result in full credit for the discussion board. You could always reply and ask another question….this would spark a conversation in the discussion board.

**Again, your comments to the “Forum/Discussion” area are due before Monday at Noon.**

Here are few rules that will help you ensure that you receive all the credit that is due to you:

1. Turn in all work on time. No work will be accepted late. No partial credit is given for late work.
2. You have one week (7 days) after your grades are posted to contact me if you notice that your grades are incorrect. You will know that grades are posted because I will always post a message in **News Forum** telling you so.
3. You can expect me to correct/post your grade for your discussion board postings within a few days after they are due.
4. Don’t wait until the last minute to complete assignments. Because everything is time stamped, it will be obvious to me if you do this on a regular basis. Work turned in at the last minute is usually obvious because it is often incomplete, incorrect, and substandard.

**Attendance: Please refer to Morehead State University’s 2010-2011 Undergraduate Catalog. (**[**http://www.moreheadstate.edu/catalog/**](http://www.moreheadstate.edu/catalog/)**)**

**Actually…attendance is pretty regular and flexible based upon you BUT you must meet the deadlines for all weekly assignments and projects. Your work must be of quality and not substandard.**

**Attendance/ Interactivity Policy:**

Students are required to visit the course Bbsite at least three times a week in order to retrieve NEW assignments, post homework and participate in thread discussions about chapters or assignments. Students should dedicate enough time to visit the site and complete online participation assignments. The number of hours is arbitrary to the student; this being said, some students will spend less time and some more time to perfect their assignments. Spend the time you need to turn in your best work; substandard work is not acceptable. Use your tools to correct spelling and grammar mistakes and take at least 5 minutes to think about a response to a thread before beginning to answer or comment on someone else’s reply.

This is an individual and team work based online course. Participation and communication with members of the team and class are crucial for your progress and success in this course.

**Academic Honesty and Integrity**

While team/group work and group learning is highly recommended. Cheating, fabrication, plagiarism or helping others to commit these acts will not be tolerated. Academic dishonesty will result in severe disciplinary action, including, but not limited to, failure of the student assessment item or course, and/or dismissal from MSU. If you are not sure what constitutes academic dishonesty, read The Eagle: Student Handbook or ask your instructor. The policy is located at <http://www.moreheadstate.edu/files/units/dsl/eaglehandbook/studenthandbook2008-09.pdf> on page 11.

 ***If you quote anything from someone else, use the APA style format to acknowledge that person’s work. It does not count against you, if you give the appropriate person credit. Please see this link for quick APA Style formatting:*** [***http://owl.english.purdue.edu/owl/resource/560/01/***](http://owl.english.purdue.edu/owl/resource/560/01/)

 **Note:** Copying information from the Internet is plagiarism if appropriate credit is not given. Please see the Course Policies section on Blackboard.

##### Policy for Accommodating Students with Disabilities

Americans with Disabilities Act (ADA)

Professional staff from MSU Academic Services Center (ASC) coordinates efforts to address accessibility needs and class accommodations with instructors of students who have learning or physical disabilities.  IET Faculty will cooperate with the ASC staff to accommodate the needs of students taking departmental courses.

In compliance with the ADA, all students with a documented disability are entitled to reasonable accommodations and services to support their academic success and safety. Though a request for services may be made at any time, services are best applied when they are requested at or before the start of the semester. To receive accommodations and services the student should immediately contact the Disability Services Coordinator at: 204-E ADUC, 606-783-5188,  or e.day@moreheadstate.edu.  It is student’s responsibility to inform the instructor of any special needs before the end of the second week of classes.

#### Portfolio:

At the end of the semester, students will have carefully prepared an electronic course portfolio online as a link to their webpage containing all course projects and/or materials in an organized and professional format. More information will be presented to you throughout the semester.

**Assignment and Deadline Policies**

No late course work will be accepted. This course will be fast paced and homework will be expected on time. I cannot grade assignments fair if I don’t grade them together. Any assignments not meeting the posted deadline will not be accepted.

**Late work will not be accepted and obtain a grade of zero points.**

**Evaluation:** (subject to change)

|  |  |
| --- | --- |
| **ASSESSMENT MATERIAL** |  |
| Group Project (Safety Video) | (Assess #) 1,2,3,4,5,6,7 | **200** |
| Research Paper | (Assess #) 4,5,6,7 | **100** |
| Tests/ Quizzes | (Assess #) 1,2,3,4,5,6,7 | **450** |
| Discussion Board Participation/ Misc. Assignments | (Assess #) 1,2,3,4,5,6,7 | **150** |
| **DIGITAL PORTFOLIO** | **100** |
| **OSHA CARD or CareerSafe 10-hour training (BONUS)** | **100** |
| **Total Maximum Points** | **1000** |

**Grading System:**

90 -100% = A

80 - 89% = B

70 - 79% = C

60 – 69% = D

00 – 59% = E

**Late work will not be accepted and obtain a grade of zero points.**

**Course Outline** *(Subject to Change)*

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| --- | --- | --- |
| **Week** | **Topics** | **Readings and Assignments** |
| 1 | Introduction, course structure, requirements. Exploration period throughout Bb. Safety Philosophy.**Part 1 Historical Perspective and Overview****Chapter 1** – Safety and Health Movement, Then and Now**Chapter 1** – Onion & O’Toole | **Read Chapter 1 in both books.**Chapter Quiz – GoetschChapter 1 Forum – Onion & O’Toole |
| 2 | **Chapter 2 –** Accidents and Their Effects**Chapter 3 –** Theories of Accident Causation**Chapter 2 –** Onion & O’Toole | **Read Chapters 2 & 3 Goetsch.** Chapter Quizzes – GoetschChapter 2 Forum – Onion & O’Toole |
| 3 | **Chapter 4 –** Roles and Professional Certifications for Safety and Health Professionals **Chapter 5 –** Safety, Health, and Competition in the Global Marketplace**Chapter 3 –** Onion & O’Toole | **Read Chapters 4 & 5 Goetsch.** Chapter Quizzes – GoetschChapter 3 Forum – Onion & O’Toole**Agencies Form Activity** |
| 4 | **Part 2 Laws and Regulations** **Chapter 6 –** The OSH Act, Standards, and Liability **Chapter 7 –** Workers’ Compensation | **Read Chapters 6 & 7 Goetsch.** Chapter Quizzes – Goetsch**Agencies Form Activity Due** |
| 5 | **Chapter 8 –** Accident Investigation and Reporting **Chapter 9 –** Product Safety and Liability**Chapter 4 –** Onion & O’Toole | **Read Chapters 8 & 9 Goetsch.** Chapter Quizzes – Goetsch  |
| 6 | **Part 3 The Human Element****Chapter 10 –** Ergonomic Hazards**Chapter 11 –** Stress and Safety**Chapter 12 –** Safety and Health Training**Chapter 5 –** Onion & O’Toole | **Read Chapters 10, 11 & 12 Goetsch.** Chapter Quizzes – GoetschChapters 4 & 5 Forum – Onion & O’Toole**Group Training Video Topics Assignment List** |
| 7 | **Chapter 13 –** Violence in the Workplace**Part 4 Hazard Assessment, Prevention, and Control****Chapter 14 –** Mechanical Hazards and Machine Safeguarding**Chapter 15 –** Falling, Impact, Acceleration, Lifting and Vision Hazards | **Read Chapters 13, 14 & 15 Goetsch.** Chapter Quizzes – Goetsch**Group Training Video Topics Assignment List Complete** |
| 8 | **Chapter 16 –** Hazards of Temperature Extremes**Chapter 17 –** Pressure Hazards**Chapters 6 &7 –** Onion & O’Toole | **Read Chapters 16 & 17 Goetsch.** Chapter Quizzes – GoetschChapters 6 & 7 Forum – Onion & O’Toole**Request for Topic of Research Paper** |
| 9 | **Chapter 18 –** Electrical Hazards**Chapter 19** – Fire Hazards and Life Safety**Chapters 8 &9 –** Onion & O’Toole | **Read Chapters 18 & 19 Goetsch.** Chapter Quizzes – GoetschChapters 8 & 9 Forum – Onion & O’Toole**Topic for Research Paper Reached** |
| 10 | Spring Break | **Spring Break** |
| 11 | **Chapter 20 –** Industrial Hygiene and Confined Spaces**Chapter 21** – Radiation Hazards**Chapter 10 –** Onion & O’Toole | **Read Chapters 20 & 21 Goetsch.** Chapter Quizzes – Goetsch |
| 12 | **Chapter 22 –** Noise and Vibration Hazards**Chapter 23** – Computers, Automation and Robots**Chapter 11 –** Onion & O’Toole | **Read Chapters 22 & 23 Goetsch.** Chapter Quizzes – Goetsch |
| 13 | **Chapter 24 –** Blood borne Pathogens in the Workplace**Part 5 Management of Safety and Health****Chapter 25** – Preparing for Emergencies and Terrorism**Chapter 12 –** Onion & O’Toole | **Read Chapters 24 & 25 Goetsch.** Chapter Quizzes – GoetschChapters 10 - 12 Forum – Onion & O’Toole |
| 14 | **Chapter 26 –** Ethics and Safety**Chapter 27** – Hazard Analysis Prevention and Safety Management**Chapter 28** – Promoting Safety | **Read Chapters 26, 27 & 28 Goetsch.** Chapter Quizzes – Goetsch |
| 15  | **Chapter 29 –** Evironmental Safety and ISO 14000**Chapter 30** – Total Safety Management in a Quality Management Setting**Chapter 31** – Establishing a Safety-Friendly Corporate Culture | **Read Chapters 29, 30 & 31 Goetsch.** Chapter Quizzes – Goetsch |
| 16  | Flexible Week | **Research Papers Due** |
| 17 | **Finals Week**  | **Group Safety Training Videos Due** |