

**OCCUPATIONAL SAFETY AND HEALTH****Labor Studies 575:338 – Mondays 3:55 pm – 6:55 pm****Amy J. Bahruth, MS, IH****908-812-0974 (cell)****Email: [abahruth@work.rutgers.edu](mailto:abahruth@work.rutgers.edu)****Office Hours by Appointment****Teaching Assistants: Vanessa Costeria, Deborah Grant, Ryan Lind, Ka'Rita Sergeant****COURSE DESCRIPTION:**

This course provides an overview of the important issues in Occupational Safety and Health. We will not only focus on the Occupational Safety and Health Act and its standards (or lack thereof), but on the larger political agenda of the global economy and how it impacts on the safety and health of workers around the world. The class style will be participatory, including small group discussions and activities. Related videos will supplement our class discussion.

The challenge of providing safe and healthy workplaces in a context of a market economy and global competition that produces pressure for low cost production. Students will consider major types of workplace health and safety problems; review existing public policy in the area; and learn how to conduct a workplace audit. They also consider how employers, unions, and public policy might improve health and safety outcomes. Issues are addressed using multiple disciplines (sociology; history; industrial hygiene; and employment relations).

**Assessment of the Core Learning Objective:** Students will be assessed on the objective by how well they apply those concepts, and substantive institutional knowledge, to understanding contemporary developments related to work on exams and written assignments. A standard rubric will be used for this purpose. (Institutional knowledge encompasses labor, law, and work practices, in the U.S. and other nations now operating in a global framework.)

**COURSE READINGS:**

All readings for this class can be found on Rutgers Sakai. <https://sakai.rutgers.edu/portal>. To log on, enter your Rutgers ID and password in the upper right hand corner. Look for the tabs at the top of the next page. Click on the tab: 37:575:338 Spring 2015. **Readings are organized by week.** Homework will also be listed by date due. See Course Requirements for more on homework. Each week, there will be a short quiz on Sakai on the reading material for that given week. **Completion of these quizzes will count toward your participation grade.**

**COURSE REQUIREMENTS:**

*Be prepared for class.* Always read the assigned material before the class so that you can fully participate in class discussions and more easily follow the lecture. If necessary, I will ask you to bring the reading material to class with you so that you can refer to it during lectures and group discussions.

*Take careful lecture notes.* Copies of power point slides will be posted on Sakai. You should obtain lecture notes from another student if you are forced to miss a class. Class sessions will include a mixture of lectures, small group discussions, group exercises and student presentations. Students are required to *participate actively* in all aspects of the course, especially small and large group discussions and group

exercises. When participating in discussions *respect others' views and listen*. You do not have to agree with your classmates, but you must give them your full attention and consideration.

*Texting, talking on your phone, and being on Facebook or other social media* are all prohibited during class. The TA's will be sitting in the back of the room and will be able to see what's on open screens. Students who repeatedly do these things during class time will be asked to leave class and will be counted absent for the day.

### **Communication**

Students are expected to check their official **Rutgers email** account regularly for class announcements. I will communicate all official course correspondence to students via email/announcements on Sakai. Students are responsible for all information communicated to them via email by the instructor. Verbal discussions before or after class will not be considered official unless followed up with written email confirmation. This includes requests for excused absences.

### **Assigned Groups:**

Groups will discuss course reading, prepare presentations and participate in-group activities together. Students who participate fully and enthusiastically in the experiential components of the course will get the most out of the class. Students' performance on group assignments will be evaluated both by the instructor and the other members of your group.

### **Attendance**

Students should *plan to attend every class session*. Students must sign in personally at the beginning of class; failure to do so will result in a loss of attendance points. I recognize that illness, death in the family or other emergencies happen, and will excuse absences as long as the affected student can provide me with proof. **Signing in for another student is considered academic dishonesty and can result in failing the course.**

*Be punctual.* Students who are late to class two times lose the same number of attendance points as students who miss an entire class. *Stay for the whole class.* Students who leave early without the instructor's permission will be marked absent for the entire class.

The teaching assistants will be taking attendance and will be noting lateness. It is **YOUR RESPONSIBILITY** to make sure you sign the attendance sheet each class, so make sure you find it. Attendance will be 5% of your overall grade. Additionally, signing attendance sheets is a requirement for obtaining an OSHA 30 card (see details later in the syllabus).

## **WRITTEN ASSIGNMENTS**

### **Grading Criteria**

- a. **Content:** Papers should reflect careful, thorough consideration of the assignment. All papers should have a clear, creative thesis and a strong conclusion. Papers should also demonstrate careful reading of the course material, and should cite all sources that were consulted when preparing the assignment. **Quality of weekly written article summaries and reaction papers will be evaluated based upon writing mechanics, content/detail, thoroughness, understanding of material and quality of analysis.**

- b. **Mechanics:** Student writing should **demonstrate college level competence** in grammar and style. Students with unsatisfactory writing skills will be encouraged to seek additional assistance from Rutgers writing tutorial resources.
- c. Papers the instructor(s) deem unacceptable in terms of either content and/or mechanics will be returned to the student for revision prior to grading and marked down for each day the paper is late. Failure to use spell check and grammar check to fix basic mistakes will result in automatic return of the paper without grading.

#### **Assignments:**

You will be responsible for writing one (1) reaction paper to *“Libby, Montana”*, which is a movie about asbestos exposures to workers and community residents of the town of Libby. The reaction paper is to be a minimum of a **full** three to five page typed paper and based upon questions I will give you to respond to. You will be graded on how developed your reaction is and how well you grasped the content of the movie.

You also will be responsible for three (3) reaction papers on the following reading assignments, which can be found on Sakai: OSHA’s White Paper on Injury and Illness Prevention Programs, “How NJ Fails Injured Workers”, and one other assignment on combustible dust. The reaction papers are to be a minimum of a **full** three to five page typed paper and based upon questions I will give you to respond to.

Additionally, you will be participating in small group discussions that will count towards your participation grade. You’ll also be asked to work on assignments in class in your groups or as take-home assignments. These assignments will have to be handed in for credit towards your participation grade and for credit towards your OSHA 30 card.

**EACH WEEK** as noted, you will be responsible for turning in an article from the news regarding health and safety. **You will need to write a full one-page minimum summary of the article AND a reaction to it.** There are SAMPLES of what I expect posted on the first article assignment in SAKAI. Each week your group will discuss the articles found so make sure you are prepared. **Discussing these articles will count towards your participation grade.** A few good resources for finding articles include: <http://rss.topix.net/us/osha>; OSHA.gov; and <http://weeklytoll.blogspot.com/>.

You **will NOT** get full credit for these articles if you hand them all in at the end of the semester. They are to be done each week and turned in through Sakai and a hard copy needs to be brought to class for group discussion. You will need to submit ten (10) articles to get full credit. Your grade will drop by a point for each week it is late – no exceptions.

#### **Submitting Papers**

Students will submit all written work electronically via Sakai. Students can submit their papers by clicking on the assignments tab located on the left side of the page and then click on the assignment you wish to turn in OR through the link on the week tab. From there, it’s pretty straight-forward. **All papers and homework submitted through Sakai will be checked through “turn-it-in”, which checks for plagiarism, including work from students, both past and present. If I get high percentages for plagiarism, I will take action.**

**Deadlines**

All papers will be due on Sakai by the start of class on the due date. All papers turned in after this time will be marked late. **Late papers will be marked down one point for each class that they are late.** I will not accept assigned papers in class or via email.

**Academic Integrity**

Academic integrity requires that all academic work be wholly the product of an identified individual or individuals. Joint efforts are legitimate only when the assistance of others is explicitly acknowledged and permitted by the assignment. Ethical conduct is the obligation of every member of the University community, and breaches of academic integrity constitute serious offenses. Students must assume responsibility for maintaining honesty in all work submitted for credit and in any other work designated by the instructor of the course. Students are also expected to report incidents of academic dishonesty to the instructor or dean of the instructional unit. Students are expected to be familiar with all Rutgers University policies regarding academic integrity.

**Mid-term and Final Exams**

The mid-term exam for this course will cover material (course readings, lectures, discussion questions, films, exercises, etc) from the first half of the course. It will consist of a combination of multiple-choice questions, identifications, short answers and short essay questions. The final exam will cover material from the mid-semester break to the end of the course. Both exams will be take-home exams that **MUST** be hand-written – no exceptions.

**Class Project:**

You will work in your assigned group of approximately six (6) of your classmates. I will have a list of various locations on the Rutgers Campuses for which you will conduct a hazard analysis. You will be looking at particular buildings and grounds and associated jobs within and around these buildings. You will get checklists of things to look for throughout the semester and some ideas for questions to ask the workers in the buildings.

**Your analysis should contain the following elements:**

- a.) A brief description of the jobs and work responsibilities of the workers in the buildings or on the grounds and the associated safety and health hazards of these jobs, prioritized by severity.
- b.) A brief description of the buildings and/or grounds, including the safety and health hazards of these areas, prioritized by severity.
- c.) A description of what, if any, OSHA standards apply.
- d.) Recommendations for preventative or corrective measures for controlling hazards associated with the jobs identified and the buildings/grounds assigned.

**Group Presentations**

Your group should be prepared to present your findings based upon the above elements. Be as creative as you wish in developing your presentations. You can use pictures/video and power point. **A one-page outline/summary of the presentation or a copy of your slides is required at the time of your presentation.**

Presentation dates are as listed in the class listings below and will be selected through a numbered lottery (i.e. pulled from a hat!). There will only be 10 possible spots and your presentation should be approximately 10 minutes ... 15 minutes maximum. I will hold you to your time slot unless there is an emergency situation to keep things fair for all class members. If you are unable to present your project

on the date you selected, you will forfeit your opportunity and will be required to write a ten (10)-page report instead.

I will be grading presentations on how well you cover the points outlined on the syllabus; how thorough your research and comments are; the quality of your suggested changes or controls and your overall analysis of the assignment you present on. **The group of your peers who have worked with you will also evaluate your participation in this project.** This peer evaluation will be included in the calculation of your individual grade. You will likewise be expected to participate in evaluating your peers. Specifically, peer evaluations will be based upon preparation, presentation and teamwork.

**Evaluation Criteria:**

**Grades will be based on:** 15% project, 5% attendance, 10% participation (including reading quizzes), 15% weekly articles, 15% reaction papers and 20% on each exam. Participation grades will be on a sliding scale from 60 to 100 based on your participation levels. I expect to hear from you – especially if you want to challenge something I’m saying. Don’t be afraid to speak your mind – that type of behavior gets rewarded in my class!

**Overall Grade:** A = 92 –100; B+ = 88 – 91; B = 82 – 87; C+ = 78 – 80; C = 72 – 77

**Attendance Grade:** 0 Classes Missed =100; 1 class missed = 93; 2 classes missed = 86; etc. Grade drops by seven points for each class missed.

**COURSE SCHEDULE:**

**See Sakai for Reading Assignments Due**

**Class #1: Monday, January 26th: Introduction & Course Overview**

**Lecture:** History of Occupational Safety and Health in US

**To Do:** Reading quiz on Sakai

**Optional Extra Credit:** Talk to your parents, grandparents, or other family members about your family’s work history – try to go back as far as you can. Pick one or two people to highlight and write a short 2 -3 page paper about what they did for work, what health and safety hazards or other challenges they might have faced, and any other interesting information about their work experience. This will be an open assignment due by the end of the semester.

**Class #2: Monday, February 2nd:**

**Lecture:** Introduction to OSHA; Limitations

**To Do:** NEWS ARTICLE #1; Reading quiz on Sakai

**Group Activity:** Reading the OSH Act (bring a highlighter!)

**Class #3: Monday, February 9th:**

**Lecture:** The Need for Change; Combustible Dust

**Group Activity:** Jeopardy OSHA review

**To Do:** NEWS ARTICLE #2; Reading quiz on Sakai

**DISCUSSION FOR CLASS: BE PREPARED**

Make sure you read the White Paper from OSHA on the Injury and Illness Prevention Program. You will be expected to discuss this proposed standard and consider the following:

In your opinion, will the requirements of this proposed standard reduce the likelihood of injury and illnesses in the workplace? Why or Why Not?

Why do you think this proposed standard is so vehemently opposed to by the business community? Think about this from an HR perspective if you're considering a career in that field.

How do you think OSHA, the labor movement, the COSH movement and other organizations should promote and support this proposed standard to get it passed?

**Class #4: Monday, February 16th:**

**Lecture:** Principles of Industrial Hygiene; Workers Compensation

**To Do:** NEWS ARTICLE #3; 1<sup>st</sup> Written Reaction Assignment: Reaction to OSHA’s White Paper on I2P2; Reading quiz on Sakai

**Discussion Questions from Criminal Neglect:**

1. Why do you think safety authorities and governments worldwide are soft on corporate safety crime?
2. What is your reaction to this quote: “Is a person who kills another in a bar brawl a greater threat to society than a business executive who refuses to cut into profits to make his plant a safe place to work?”
3. What arguments are presented as to why company directors/executives should be targeted for criminal prosecution? Do you agree or disagree? Why?
4. What do you think the likelihood is of a corporate criminal law being enacted in the United States? Why?

**Class #5: Monday, February 23rd:**

**Lecture:** Unsafe Acts vs. Unsafe Conditions; Job Hazard Analysis; How to Conduct a Hazard Analysis

**Group Project:** Requirements of Group Project

**To Do:** NEWS ARTICLE #4; 2nd Article Reaction Paper: How Jersey Fails Injured Workers; Reading quiz on Sakai

**Discussion Questions:** Most workplace fatalities are reported or described as “unfortunate accidents”, “freak occurrences” or “acts of god”. Based upon the readings and what we've discussed in class to date, what is your reaction to these descriptions? After reading these pieces, do you believe “accidents” are “inevitable”? What are Barab’s suggestions for improving H&S conditions in the workplace? Is it enough? Why or why not? What do you think needs to be done to address this "culture of safety" in America's workplaces?

**Class #6: Monday, March 3rd:**

**Lecture:** Hazard Communication Standard/Global Harmonization and Confined Spaces

**Group Activity:** Reading the Standard; Analysis of SDS (bring laptop if you have one!)

**To Do:** NEWS ARTICLE #5; Reading quiz on Sakai

**Class #7: Monday, March 9th:**

**Lecture:** Exit Routes, Emergency Action Plans; Blood Borne Pathogens

**Group Activities:** Imperial Chicken Plant Fire Exercise and Reading the Blood Borne Pathogen Standard

**To Do:** NEWS ARTICLE #6; Reading quiz on Sakai

**TAKE-HOME MIDTERMS DISTRIBUTED – Due March 23rd (material from first class through March 3rd)**

**Monday, March 16<sup>th</sup> – SPRING BREAK**

**Class #8: Monday, March 23rd:**

**Lecture:** Workplace Violence and Walking and Working Surfaces

**Group Activity:** Reading the WWS standard

**To Do:** MIDTERM DUE

**Discussion Questions:** Violence is a major cause for workplace fatalities in America. Is this something that concerns you, as you are about to enter the full-time workforce? What steps will you take to ensure your safety? What policies should be enacted – either nationally or through the workplace – to prevent violence in the workplace from occurring?

**Class #9: Monday, March 30<sup>th</sup>:**

**Lecture:** Asbestos

**To Do:** NEWS ARTICLE #7

**Class #10: Monday, April 6<sup>th</sup>:**

**Lecture:** Silica; Personal Protective Equipment

**Group Activity:** Reading the PPE OSHA Standard

**To Do:** NEWS ARTICLE #8; Movie Reaction Paper: Libby, Montana

**Discussion Questions:**

The company knew that asbestos was causing lung disease in its workers and didn't share that information with them. What is your reaction to this? Do you think the company officials should be held criminally responsible?

Do you think the executives deserved to do time for their actions?

Do you think the company should have been fined?

What is your reaction to the jury's verdict?

**Class #11: Monday, April 13<sup>th</sup>:**

**Lecture:** Electrical Standard and Lockout/Tagout

**Group Presentation** – Sample presentation and time for prep (5:15 pm – 7:00 pm)

**To Do:** NEWS ARTICLE #9

**Class #12: Monday, April 20<sup>th</sup>:**

**Lecture:** Ergonomics; Indoor Air Quality

**To Do:** NEWS ARTICLE #10; Reading quiz on Sakai

**Group Discussion:** Self-assessment of ergonomic risks using checklists

**Discussion Questions:**

After doing an analysis of your ergonomic risk factors, what did you discover? Is IAQ/mold an issue in your workplace, housing, etc.?

**Class #13: Monday, April 27th:**

**Lecture:** Temporary Workers – Guest Speaker

**Take Home Assignment (for OSHA card only):** Materials Handling and Powered Industrial Trucks

**Group Presentations**

**Class #14: Monday, May 4th:**

**Group Presentations**

**To Do:** Final Paper Due – Your Assignment Choice (see below)

**Distribution of Final Exam**

**OSHA CARD:** If you've attended every class and have done the materials handling worksheet and are interested in obtaining the OSHA 30 card, please bring \$5 and a self addressed envelope that I can mail the card to you in. I'll need you to sign in and provide me your home address. I must keep records for 5 years. If you missed a class or two and still want a card, please see me. Depending on the class missed, I might be able to work with you.

**Paper #4**

**Assignment Option #1:**

On February 7, 2008, a huge explosion and fire occurred at the Imperial Sugar refinery northwest of Savannah, Georgia, causing 14 deaths and injuring 38 others, including 14 with serious and life-threatening burns. The explosion was fueled by massive accumulations of combustible sugar dust throughout the packaging building.

Watch the Chemical Safety Board investigation and review the final report. One of the CSB's recommendations was to: *"Proceed expeditiously, consistent with the Chemical Safety Board's November, 2006 recommendation and OSHA's announced intention to conduct rulemaking, to promulgate a comprehensive standard to reduce or eliminate hazards from fire and explosion from combustible powders and dust."*

OSHA had initiated its Combustible Dust National Emphasis Program (NEP) on October 18, 2007, to inspect facilities that generate or handle combustible dusts that pose a deflagration/explosion or other fire hazard. There is still no specific standard.

<http://www.osha.gov/dsg/combustibledust/index.html>

<https://www.osha.gov/dts/shib/shib073105.html>

<http://www.csb.gov/videos/inferno-dust-explosion-at-imperial-sugar/>

<http://www.democraticunderground.com/111661786>

<http://www.nationallawjournal.com/id=1202674578772/OSHAs-Dust-Rule-Upheld-in-DC-Circuit?slreturn=20141130091031>

<http://www.nytimes.com/2014/08/23/opinion/the-danger-of-combustible-dust.html>

**Write a three to five page summary and reaction to this issue. Think about the following:**

- Should the employer have known that enclosing the sugar process could potentially lead to an explosion? Why or why not?
- While the combustible dust wasn't a violation of a dust standard (since there isn't one!), there were obvious violations of other OSHA standards. What were they?
- Should anyone in the Imperial Sugar Corporation be held criminally liable for the deaths and injuries of these workers? Why or why not?
- Why do you think OSHA has put promulgating this standard on the back burner?
- Should industry disregard this known hazard just because there isn't an enforceable standard they can be cited with?

**Assignment Option #2:**

Read the articles below and watch the associated multimedia presentation about working conditions in FoxConn – the manufacturing plant that makes Apple products. Combustible dust from aluminum is the cause of the latest fatalities in one plant.

<http://www.nytimes.com/2012/01/26/business/ieconomy-apples-ipad-and-the-human-costs-for-workers-in-china.html?pagewanted=all>

<http://abcnews.go.com/Technology/string-suicides-apple-manufacturer-china/story?id=10789704#.TzaztJiqZD>

<http://www.telegraph.co.uk/finance/china-business/7773011/A-look-inside-the-Foxconn-suicide-factory.html>

<http://bits.blogs.nytimes.com/2012/02/13/apple-announces-independent-factory-inspections/>

**Write a three to five page minimum summary and reaction to this report. Think about the following:**

- In your opinion, what is Apple's responsibility in safeguarding workers in the Chinese plants of its manufacturers?
- Should American corporations and their supply chains be required to comply with regulations and standards applicable to workplaces in the United States, despite where the factories are located? Why or why not?
- Does these reports change your opinion of Apple, Inc? Would it influence your decision to purchase Apple products in the future?
- Would you be willing to take action (sign petitions, write letters, attend a demonstration, etc.) to force Apple to improve their supply chain practices? Why or why not?

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### **Assignment Option #3**

Watch the documentary ***Gasland*** (Netflix if you have an account. If you don't let me know and I'll see about getting you a copy) and consider the research on the effects of hydraulic fracturing (fracking) not only on the planet and to communities but on the workers doing this work.

[https://www.osha.gov/dts/hazardalerts/hydraulic\\_frac\\_hazard\\_alert.html](https://www.osha.gov/dts/hazardalerts/hydraulic_frac_hazard_alert.html)

<http://www.latimes.com/science/sciencenow/la-sci-sn-fracking-benzene-worker-health-20140910-story.html#page=1>

<http://www.thenation.com/blog/190025/are-fracking-workers-being-poisoned-job#>

<http://www.ehjournal.net/content/13/1/82>

**Write a three to five page minimum summary and reaction to this report. Think about the following:**

- Were you aware of the dangers associated with hydraulic fracturing? How do you feel after seeing this documentary? Which scenes were the most memorable, powerful or surprising to you?
- Why do you think so many people are unaware of this issue? What are the hurdles in place that are preventing wider awareness about fracking?
- Industry representatives are adamant that gas drilling is a safe process despite the countless cases proving otherwise. If you had the ability to speak with them, what would you ask or say to them?

- Do you believe Gasland a skewed, one-sided portrayal of hydraulic fracturing? If you were to make the counter film, what would you show?
- Most importantly, consider what's happening in fracking communities and to fracking workers all across America and juxtapose that with what you've learned from the Libby, Montana experience. What are your predictions for these communities and workers in the future?

**NOTE: Program Purpose.** The Occupational Safety and Health Administration (OSHA) Outreach Training Program for General Industry teaches general industry workers about their rights, employer responsibilities, and how to file a complaint as well as how to identify, abate, avoid and prevent job related hazards. **If you attend all classes and complete all assignments, you will be eligible for an OSHA 30-Hour General Industry card.** OSHA student completion cards in the General Industry Outreach Training Program do not expire. **THE CARD COSTS \$5 and, if you meet the requirements, I will need the money at the end of the semester!**

**30-Hour General Industry Outreach Training Program – Designated Training Topics.** The 30-hour General Industry Outreach Training Program is intended to provide a variety of training to workers with some safety responsibility. Training should emphasize hazard identification, avoidance, control and prevention, not OSHA standards. Instructional time must be a minimum of 30 hours. The topic requirements are as follows:

**Mandatory - 13 hours**

**Introduction to OSHA – 2 Hours**

**Managing Safety and Health – 2 hours.** May include Injury and Illness Prevention Programs, job site inspections, accident prevention programs, management commitment and employee involvement, worksite analysis, hazard prevention and control, accident 4 investigations, how to conduct safety meetings, and supervisory communication.

**Walking and Working Surfaces, including fall protection – 1 hour.**

**Exit Routes, Emergency Action Plans, Fire Prevention Plans, and Fire Protection – 2 hours.**

**Electrical – 2 hours.**

**Personal Protective Equipment (PPE) – 1 hour.**

**Materials Handling – 2 hours.**

**Hazard Communication – 1 hour.**

**Elective - 10 hours.** Must present at least 10 hours of training on the following topics. At least 5 of the following topics must be presented. The minimum length of any topic is one-half hour.

Hazardous Materials (Flammable and Combustible Liquids, Spray Finishing, Compressed Gases, Dipping and Coating Operations)

**Permit-Required Confined Spaces**

**Lockout / Tagout**

Machine Guarding

Welding, Cutting, and Brazing

**Introduction to Industrial Hygiene**

**Bloodborne Pathogens**

**Ergonomics**

Fall Protection

**Safety and Health Programs**

**Powered Industrial Vehicles**

**Optional - 7 hours.** Teach other general industry hazards or policies and/or expand on the mandatory or elective topics. The minimum length of any topic is one-half hour.

What I'll be covering:

Asbestos – 3 hours; IAQ – 1.5 hours; Ergonomics – 1.5 hours; Combustible Dust – 1.5 hours; Workplace Violence – 1.5 hours; Silica – 1 hour